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ABSTRACT

The 1997 Asia-Pacific Programme of Educational Innovation for Development (APEID) Regional Meeting of Directors of Educational Research and Development Institutes in the Asia and the Pacific Region reviewed research from the Asia-Pacific region related to teachers, teacher education, and teacher development. The meeting identified common educational research priorities in the region and developed a collaborative framework for addressing issues and priorities identified by the participants. Participants were 14 directors of institutes for educational research and development from China, Indonesia, Iran, Japan, LAO P.D.R., Malaysia, New Zealand, Papua New Guinea, Philippines, Republic of Korea, Sri Lanka, Thailand, The University of the South Pacific (Fiji), and Vietnam. Chapter 1 of this report introduces the meeting. Chapter 2 provides summaries of the country papers. Chapter 3 addresses a future research agenda for teachers and teaching, offering a framework for discussion, panel presentation summaries, and priorities for collaborative research. Chapter 4 addresses educational research, policy making and decision making, and implications for teachers and teacher education and development. Chapter 5 summarizes the group's recommendations. Two appendixes comprise the bulk of the report. Appendix 1 provides complete versions of the country papers. Appendix 2 offers a general meeting paper "Strengthening the Role of Teachers in a Changing World: Issues, Prospects and Priorities" (Rupert Maclean and Ian Birch). (SM)

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NIER-APEID

Teachers, Teacher Education and Development

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Teachers, Teacher Education and Development:

Report on an APEID Regional Meeting of Directors of Educational Research and Development Institutes in the Asia and the Pacific Region

Final Report of a Regional Meeting
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Chapter 1: Introduction

Background to the Regional Meeting

In 1995, the Asia-Pacific Centre of Educational Innovation for Development (ACEID) in UNESCO, Bangkok, and the Australian Council for Educational Research (ACER), co-sponsored the first meeting of Directors of National Institutes of Educational Research and Development in the Asia-Pacific region. The purpose of that meeting was to identify educational priorities of research centres and means of collaboratively addressing those problems. Fourteen countries in the region participated in that meeting held in Melbourne, Australia, the report of which was published in 1996.

One decision taken at that meeting was to hold annual meetings of Directors. The second meeting was held in Bangkok in December, 1996, in conjunction with an ACEID organized meeting on "Re-engineering Education for Change: Educational Innovation for Development". The theme for this meeting of Directors was "Monitoring Achievement" and the report is in press.

The National Institute for Educational Research (NIER) of Japan kindly offered to host this third meeting of Directors. It was fortuitous for the Directors attending this meeting that it was held at the same time as the celebration of the thirtieth year of NIER-UNESCO co-operation and the Directors present were invited, and grateful for the opportunity, to participate in the anniversary celebrations.

The choice of "Teachers, Teacher Education and Development" as the theme for this meeting was clear recognition of the fact that teachers are central to the educational reform and development process. Good education requires good teachers. The Directors of Educational Research and Development Institutions present at this meeting also took up - from the research perspective - some of the themes examined at the International Conference on Education on "Strengthening the Role of Teachers in a Changing World" which was organized by the International Bureau of Education (IBE), Geneva in October, 1996, and to which this region made a significant contribution.

Objectives

The purpose of this meeting was to review research in different countries in the Asia-Pacific region relating to teachers, teacher education and teacher development, with a view to identifying common educational research priorities in the region and to developing a collaborative framework for addressing the issues and priorities identified by this meeting. The meeting had the following specific objectives:

1) to identify current research priorities in countries of the Asia-Pacific region regarding teachers, teacher education and development and to locate these within an international context;

2) to review national institutes' priorities for educational research and development activities in terms of teachers and teacher education;

3) to explore common research interests and the means for active collaboration among national institutes, including the joint conduct of research studies, publications and the dissemination of research findings on the topic of the meeting; and

4) to explore the development of an on-going framework for co-operation among national institutes of educational research and development as part of the Asia-Pacific Programme of Educational Innovation for Development (APEID).

Participants

Fourteen directors of institutes for educational research and development (or their nominees) participated in this meeting. They were from China, Indonesia, Iran, Japan, Lao P.D.R., Malaysia, New Zealand, Papua New Guinea, Philippines, Republic of Korea, Sri Lanka, Thailand, The University of the South Pacific (Fiji) and Viet Nam. One observer from the Philippines was also present. Participating from UNESCO, ACEID, Bangkok were the Chief of ACEID, Rupert Maclean and Ian Birch, as the Resource Person. An apology was received from Australia for absence because of illness.

The list of participants, the observer and the NIER staff who participated in and contributed so much to this meeting appear in Annex 1.

Inauguration

The meeting was inaugurated by Mr. Yukihiko Hishimura, Director-General of NIER; Mr. Yasuo Nosaka, Deputy Director-General in charge of UNESCO and International Affairs, Monbusho; and Mr. Rupert Maclean, Chief of ACEID.

Nomination of Officers

The meeting elected, with acclamation, the following officers:

Chairperson:	Dr. Chandra L. V. Jayatilleke (Sri Lanka)
Vice-Chairpersons:	Dr. Mahmoud Mehrmohammadi (Iran) Dr. Hoang Duc Nhuan (Viet Nam)
Rapporteurs:	Dr. Amir Salleh (Malaysia) Dr. Anne Meade (New Zealand) Dr. Ian Keith Falconer Birch (UNESCO)

Meeting Procedures

The meeting operated with the following modalities:

- plenary country paper presentation sessions, with discussion,
- plenary presentations reporting an UNESCO meeting, with discussion,
- plenary panel presentations, with discussion,
- small group discussion sessions,

- time for individual writing of panel presentations, and
- a plenary report discussion session.

NIER-UNESCO Thirtieth Anniversary

The participants of the meeting were invited to attend, as official guests, the celebrations for the thirty years of NIER-UNESCO co-operation. The invitation was gladly accepted and the participants enjoyed fully the official recognition of the occasion by the Director-General of NIER, Mr. Yukihiko Hishimura and the Director-General of UNESCO, Mr. Federico Mayor, the lecture by Mr. Isao Amagi on the Delors Report and the reception which followed.

Report Format

Chapter 2 of this report comprises the Country Paper summaries. The completed Papers appear in Appendix I. General papers presented are found in Appendix II.

Chapters 3 and 4 of this Report address the two major themes under discussion at the meeting, namely:

- A Future Research Agenda for Teachers and Teaching; and
- Educational Research and Decision-Making: Implications for Teachers and Teaching.

The concluding chapter summarises the recommendations agreed upon.

The draft final report was presented to the participants of the Meeting on its final day (15 July 1997) and was adopted with minor modifications.

Chapter 2: Teachers, Teacher Education and Development: Summaries of Country Papers

In the summaries appearing below, the Directors of Research Institutes outline what is being undertaken in each country with regard to teachers, teacher education and teacher development. Succeeding chapters will elaborate on two themes under consideration at the meeting; and the complete country papers appear in Appendix I of this report.

China

1. The situation of teachers and teacher education

A. Factors in the improvement of the teaching complement:

increasing the number of full-time teachers in regular schools at all levels,

adopting a Teachers' Law,

adopting a teacher's qualification system,

implementing a system of teachers' professional titles,

raising teachers' salaries, and

improving teachers' housing conditions.

B. Problems and issues:

lower cultural competence, moral and ethical standards and professional competence,

teacher shortages and surpluses,

inadequate teaching staff structures,

uneven regional distribution of teaching staff,

inefficient management systems, and

a rigid curriculum, conservative teaching methods, and/or irrelevant teaching content.

C. Trends in teacher education:

shift from a qualification remedial program to teachers' professional development,

regionalisation of teacher education development,

emphasis on science, research and credentials, and

basic stabilisation of an independent system of teacher education.

2. Present priorities for research and development

Universalisation of nine-year compulsory education and eradication of illiteracy by the end of this century;

To perfect the current teacher education structure;

To further strengthen implementation of the teachers' qualification system;

To continue to improve teachers' status by determining the average salary of teachers to be no less than that of other equivalently qualified and experienced public servants; adopting favourable policies for teachers' housing conditions; improving the medical care for teachers; and, settling the problems of community-paid teachers;

To deepen structural adjustment;

To renew the syllabus of subjects taught at the teacher training institutions;

To reform the curriculum so as to reflect national values and latest developments in the field of teacher education;

To ensure the inseparability of pre-service and in-service training; and

To reform teaching methodologies.

3. Research activities being undertaken and planned with respect to teachers and teacher education by the National Centre for Education Development Research (NCEDR)

Designing an evaluation indicator system for effective teaching services (project of the World Bank).

Indonesia

The development of education in Indonesia, as an integral part of national development as a whole, has been pursued vigorously and successfully during the past 30 years under the present government. The net enrolment ratio for students has increased dramatically, about twice in primary school and three times in junior and senior secondary schools respectively. However, the quality of education in general as shown for example by students' achievement has not been satisfactory due to various factors such as teachers, the instruction materials, the curriculum, the evaluation system.

In general the provision of teachers in schools at all levels is adequate in terms of teacher-student ratio (1:27, 1:17, and 1:12 for primary, junior secondary, and senior secondary schools). In reality there is an uneven distribution of teachers among schools and regions which causes an over-supply of teachers on the one hand, and a shortage of teachers on the other.

Teacher quality in general is also not satisfactory, especially in regard to their level of education, educational background, mastery of the subject matter being taught, and the teacher's performance at school. The largest proportion of primary school teachers and a large percentage of both junior and senior secondary school teachers have an education level lower than the minimum level required. There is also a mismatch between teachers' educational background and the subjects being taught.

Several ministries and various institutions are involved in the management of teachers. Since there is a lack of co-ordination among them, teacher management, specially in regard to teacher recruitment, placement and supervision has not been satisfactory.

Many efforts have been made to improve the performance of teachers by improving their condition

and welfare, such as with the introduction of a promotion system using credit points, giving a special allowance for teachers, and the extension of the teaching service time. However, the teaching profession is still not a popular choice for high achieving students.

Since 1990, all teachers must have a diploma in teaching from higher education institutions, namely DII, DIII and SI programmes for teachers for primary, junior secondary and senior secondary schools respectively. Thirty-six higher education institutions are offering teacher education programmes. Their quality varies and they are being accredited nowadays.

Basically there are two types of in-service teacher training offered at present. One is the re-certification training programme to upgrade teachers' level of education to meet the minimum education standard. The other is regular refresher courses to keep teachers' competencies up-to-date.

A number of important issues emerging from the situation of teachers and teacher training need to be addressed by further research. These issues, among others, are related to: (1) the uneven distribution of teachers and the imbalance between the supply and demand of teachers, (2) mismatches of teachers' education background and the subjects being taught, (3) unreliable data on teachers, (4) low mastery of subjects by teachers, (5) the low-quality of teacher performance, (6) the unattractiveness of the teaching profession despite its important function and responsibility, (7) cost-benefit analysis of teacher training, and (8) the implementation and impact of a promotion system using credit points.

Iran

A. Background

Iran is a country with a population of 60 million. Almost 18 million students study in about 117,000 schools. In the academic year 1995-96, the total number of teachers working at different levels of schooling was 793,735, of whom 361,953 were women.

Primary and lower secondary school teachers are trained in two-year Teacher Colleges governed by the MOE. Upper secondary school teachers receive their pre-service training through integrated teacher training programs offered by public universities which are independent of the MOE. All student teachers are selected through the national entrance examination for higher education institutions held annually.

A variety of in-service teacher training programs and institutions exist in Iran. The programs are mainly of two types; degree and non-degree programs. Institutionally, however programs are offered at teacher colleges institutes, universities (public and private) and higher education in-service institutions. The Distance Education University of the country, with more than 120 branches, plays an important role in this respect.

B. Problems and Issues

1. Quantity: Although many of the two-year teacher colleges have been closed down mainly due to the oversupply of teachers in the past few years, shortages of teachers for lower and upper secondary schools, specially in rural, scattered and economically undeveloped parts of the country, remains a problem.

2. Quality: Improvement of the quality of teacher training programs, both pre- and in-service, has become the prime target of attention of MOE. The problem is, first and foremost, rooted in the fact that the more talented are not usually attracted to this profession.
3. Collaboration of higher education institutions: Higher education institutions, in general, do not exhibit any great interest and enthusiasm in playing an active role in pre-service teacher education. This particularly causes problems for upper secondary teacher education.

C. Trends

Some of the measures or policies that are either being thought about or have already entered the implementation stage are outlined below. The details of each are discussed in the full country paper.

1. Voluntary teachers' competency examination.
2. Training the necessary manpower to be able to teach subject-specific teaching/learning strategies.
3. Double subject specialisation for upper secondary teachers to compensate for the lack of trained teachers in rural and economically undeveloped areas of the country.
4. The teacher researcher program developed in 1996 and carried out for the first time in 1997.
5. The opportunity for teachers' sabbatical leave.
6. Moving away from absolute centralisation in governing the education system with the implication of teachers' involvement in decision-making.
7. Devising a new salary scheme for teachers.
8. Investigating the possibility of partially or completely replacing the current mode of pre-service teacher education.
9. Executing new and innovative modes of in-service training.

D. Research

a) Structure

The establishment of the Institute for Educational Research (IER) in 1996 affiliated with the MOE promises a boost to educational research in all areas concerned.

b) Projects

Since 1989, 34 research projects concerning teachers and teacher development have been carried out within the MOE. A number of research projects that are either at the planning stage or in the process of implementation are identified in the country paper.

Japan

Introduction

This Report was written, focusing on Teacher Education, from the concept of collaboration among

related bodies or persons including researchers, and the consideration of teachers as autonomous learners.

1) Contemporary Conditions Surrounding The Teaching Profession

The Teacher Education System has been changed by the educational and administrative reform based on reflection for modernisation since the Meiji era, and the vision for social change.

Under these conditions, teachers have been facing many problems, such as juvenile delinquency, "examination hell", professional development of themselves. Teachers come gradually to feel a sense of powerlessness or helplessness. In some cases, such feelings lead him/her to burnout.

2) Actual Figures and Problems of the Present System

a) Status and Recruitment: The status of teachers is guaranteed by law, more tightly than that of other general public employees. In addition, people tend to evaluate teachers severely on their morality. There is a tendency for teachers to over-work.

While the social status of the teaching profession is not very high, it is one of the occupation females aspire to become because it is intellectual and there is no sex discrimination. As a result of today's economic depression, there are also many males opting for teaching.

b) Pre-service Education: Together with the extension of higher education and the increase in the number of school children, institutions of pre-service education have increased, going to a higher stage of schooling, and tending to become over academically-oriented. But because of major decreases in demand, many candidates give up their hope of becoming teachers. So pre-service education, institutions of have doubted their 'raison d'etre', in addition to facing criticism of their academically-oriented curriculum.

Therefore, with the financial crisis, most universities and colleges, especially private schools, are now at a turning point as to whether to continue pre-service education of teachers, or not.

c) INSET: Teachers are required to undergo continual training during their career by the relevant laws. Therefore, each authority provides a variety of INSET programs for beginning and/or experienced teachers.

Under this system, many teachers have been excessively urged to attend INSET programmes.

3) Trends in Research and Development work

There is research into professionality, the professionalism of teachers, and professional development of teachers. But even now, what kind of qualities and abilities teachers should possess is one of the most controversial issues.

4) Current Issues

Both educational and research in universities are not considered useful enough. Moreover, each sector of education and educational research is isolated. Therefore, to promote SBM, the projects should start to collaborate with related persons and formal as well as informal bodies.

5) Intentions for Research and Development Work

The authorities need to understand the over-supply for teacher education institutions, and to distinguish each authority's proper roles and to clarify their limitations.

Furthermore, authorities should leave things to teachers' autonomous efforts in their life-span development as much as possible on the condition that the authorities improve working conditions to reward their efforts.

Paying attention to these research activities with respect to teachers and teacher education have been undertaken or planned by NIER.

Lao PDR

Over the past sixteen years, the Government of Lao PDR has substantially increased the number of schools in the country. The rapid growth in the enrolment of students has required the recruitment of a large number of additional teachers at all levels.

The demand for teachers created by the rapid growth of student enrolments has exceeded the supply of trained teachers from the teacher training institutes. In order to remedy this situation it has been necessary to employ a substantial number of untrained and unqualified teachers at different levels of education in the provinces.

A network of separate teacher training colleges (TTC's) has been established for training teachers for crèche, kindergarten, primary, lower secondary and upper secondary schools. In addition, there are TTC's for training physical education instructors, art teachers, and special teachers for working with monks and ethnic minorities.

Trainees admitted to each level of teacher training institution come from the various districts of the provinces where the institution is located. A high proportion of teachers in TTC's are not qualified.

The curricula for all teacher training programmes includes a large number of subjects with a major emphasis on theory. For example, the three year curriculum for primary teachers includes up to fifteen subjects; which are not always appropriate for the levels at which the trainees will teach. In all levels of teacher training institutions, it is observed that the teaching method used predominantly consists of the lecture method. Only a few teacher training institutions make use of audio visual aids such as charts.

A national system does not exist for the in-service training of school teachers, teacher trainers or administrators, except for the in-service training of science teachers at the Institute Universitaire de Pedagogie. There is some short term in-service training for upgrading and updating the skills and knowledge of untrained and unqualified teachers. These upgrading and updating courses are offered by 11 centres throughout the country.

The main problems and issues that need to be addressed with regard to teachers and teacher education in Lao PDR are:

- standardisation of the teacher training curriculum;

- excessive multiplicity of the teacher training systems;
- reduction in the number of teacher training colleges;
- dissatisfaction with administrative procedures;
- a mismatch between in-service training of teachers and that of teacher trainers;
- a shortage of instructional materials; and
- poor conditions of employment.

In addressing these matters for concern the government is giving priority to:

- reforms in teacher training in the areas of policy development through: the National Teacher Education Advisory Board that is to be set up by the Ministry of Education; and curriculum and training reforms through a Teacher Development Centre that is to be established.
- the upgrading of physical facilities;
- institutionalisation of adequate in-service teacher training; and
- production and distribution of instructional materials for primary and lower secondary schools and teacher training colleges.

Malaysia

Pre-service teacher education programs are mainly conducted by the thirty-one teacher training colleges (TTC) and nine local universities. Except for their Post-Graduate Teacher Education Program, TTCs prepare non-graduate teachers to serve at primary and lower secondary levels. Local universities provide teacher education for those wishing to teach in the secondary schools. These universities provide two types of teacher training program: a one-year diploma in education and a four-year integrated basic degree course. The training curriculum offered by the TTCs and local universities is generally the same in structure.

In-service training programs for teachers encompass four major types: (1) enrichment programs or programs to raise teachers' knowledge and skills; (2) familiarisation with new curricula, teaching skills and practice; (3) implementation of large scale innovations in teaching; and (4) specialisation programs, that is, training teachers to be specialised in specific education programs and activities.

A major problem facing pre-service teacher training programs is the nature and the content of the curriculum, identified as insufficient to enable new teachers to encounter various difficulties and to solve new emerging classroom problems. Other major problems are the lack of relevant research on teacher education, the declining status of teachers and the imbalance between school reforms and reforms in teacher education programs. With regard to in-service training programs, among their major problems is that they are carried out without sufficient needs assessment and there is a lack of coordination among responsible institutions.

Research on teachers and teacher education is now recognised to be one of the most important areas of research activities. This research is mainly carried out by various divisions in the MOE, other public agencies, local universities, TTCs, individual researchers and international agencies.

Research work that is undertaken by individual researchers is generally narrow in its focus, its degree of generalisability is limited, the research work is not published and most uses cross-sectional design. Research that is conducted by the MOE and local universities is mainly policy-oriented research and its findings are primarily utilised to facilitate planning and the policy making process. Overall, the research work that has been conducted on teachers and teacher education can be clustered into six main themes: (1) teachers' pre-service training; (2) teachers' in-service training; (3) teachers' socialisation, welfare and needs; (4) teachers' responsibilities; (5) teachers and the teaching and learning process, and (6) teachers' knowledge and skills.

In order to inculcate a research culture at the school level and to make teachers more active researchers, research methodologies, specifically action research, is now becoming an important topic in the in-service training curriculum for teachers. At the same time TTC lecturers are also encouraged to conduct research and development activities.

Research work that has been undertaken by the Educational Planning and Research Division (EPRD) can be categorised into four main themes: (1) in-service training for teachers; (2) teachers and the teaching and learning process; (3) teachers' functions and workload; and (4) teachers and curriculum implementation.

Current developments in the MOE, particularly with the strong emphasis on the usage of multi-media technologies at all levels provide an optimistic picture of future research on teaching and teacher education in Malaysia. A broad base can be built for future research in this important area.

New Zealand

Radical reform of the administration of education in New Zealand has resulted in significant changes for teachers and teacher education. All educational institutions, including schools and tertiary institutions providing teacher education, have become autonomous and self-governing, and are able to make most decisions themselves, including how they spend the bulk grant given by Government. These bulk grants are based on the numbers of full-time equivalent students enrolled. In the case of higher education places, including those for teacher education, the Government decides how many student enrolments it will subsidize. Students have to pay fees as well.

The Government has encouraged competition in the provision of teacher education, although grants are only given to providers who are accredited by the New Zealand Qualifications Authority and for programmes approved by that Authority. The number of accredited institutions, the types of institutions, and the number of student teachers have recently increased significantly. This is, in part, because the Government and the market are responding to a teacher shortage. The shortage and the higher education fees have resulted in pressure for course structures to change, including shortened graduate courses. Also, increased numbers of unqualified teachers have been given a Limited Authority to Teach.

However, there is also a trend for teaching to be upgraded to a graduate profession. Many student teachers are gaining a BEd degree, sometimes as well as a Diploma of Teaching. Some colleges of education are amalgamating with universities, while some are providing degree courses on their own or with a nearby university.

Despite decentralisation, there is widespread acceptance of the knowledges needed by teachers, and

agreement on the curriculum for pre-service teacher education.

With the proliferation of new providers of teacher education, quality assurance is under the spotlight. There are many agencies involved in front-end accreditation and approval processes, as well as one for registering teachers, and others to moderate the on-going situation. Attempts to set up an overarching organisation have not yet been successful.

In-service teacher education is the responsibility of each school or early childhood centre. This has to be paid out of their Government bulk grant. It is usually needs-based, responding to the needs of both schools and teachers. There are many providers of in-service courses and professional development. The most popular providers are institutions which also provide pre-service programmes, and those contracted by the Ministry of Education - usually to support curricular changes.

Issues in teacher education include the competencies of beginning teachers; evaluating the new providers, structures, and modes of pre-service training; supply and demand in some locations or subjects; improving the effectiveness of teachers working with Maori students; teachers' pay; and effective continuing professional development of teachers.

Priorities for research include clarifying the competencies and knowledge bases needed by beginning teachers; comparing the efficacy of different course structures, lengths and modes of delivery of pre-service courses; finding ways to train more effective teachers of Maori students; examining which approaches to professional development result in sustained improvement of performance; and using information technology to enhance teaching and learning.

Papua New Guinea

Papua New Guinea began to introduce a program of education reform in 1993 which will take about ten years to implement. The reforms are intended to improve access and retention rates as well as improve curriculum content and implementation in both primary and secondary education. A new education structure has been introduced. Consequently it has been necessary to review and reorganize teacher education both in the light of the education reforms and the need to improve quality and standards for teacher training (both pre-service and in-service) and the teacher education curriculum.

Teacher education is governed by a number of Acts and authorities and one current idea is to centralise all activities within one authority. Pre-service teacher training is provided by both government and church agency teachers colleges, all of which operate under a unified system of teacher education. Secondary teachers are trained at the Goroka University which offers subject specialization. Current total college enrolments are over 700 and 500 for primary and secondary trainees respectively. Elementary teacher training is in its formative stage and is being conducted using an in-service training mode. In-service training is important and is delivered through ongoing school and province based activities, special packages, part-time and distance opportunities as well as including residential courses and post-graduate overseas courses.

Special education is being given increasing attention at teachers colleges. The primary teachers college curriculum is organized into five strands, parts of which are presently under review.

Funding for teacher education continues to be a matter of concern.

The review of aspects of teacher education is being undertaken as part of the Higher Education Project. This project is assisting to initiate teacher education reforms and it is focussing on upgrading the quality of teachers colleges so that they, in turn, offer a sound professional experience for teachers (both pre-service and in-service) of equivalent university standard. This emphasis and focus has implication for co-ordination across the higher education sector in matters such as assessment, validation, curriculum, teaching practice studies and methodology, staff appointments, and teacher registration. Already strategies for possible improvements are being proposed through this project.

Another project – the Primary and Secondary Teacher Education Project – which has yet to commence, will focus on issues including upgrading the skills of primary teachers, strengthening of secondary teacher education, enhancing special education, the provision of further professional experience for teacher educators, the provision of infrastructure development, and addressing gender equity issues.

There is no major research currently being undertaken by the Department of Education, but it is assumed that, in the light of the outcomes of the above projects, the Department may wish to research in the directions recommended or proposed, so that it can arrive at well-informed policies for implementation.

Philippines

The 1987 Philippine Constitution explicitly affirms, in section I, Article XIV, that:

> The state shall protect the right of all citizens to quality education at all levels and shall take appropriate steps to make such education accessible to all.

It also recognizes that quality education cannot rise beyond the quality of the teacher. Thus Section 5 (4) provides:

> The state shall enhance the right of teachers to professional advancement.

Steps to improve the education system include: to promulgate and issue laws particularly to improve and upgrade teachers' capabilities, welfare and benefits; to create and define career service paths for promotion and career planning; to strengthen pre-service education for teachers and to encourage teacher organizations which would look after teachers' welfare and conditions of employment, and encourage professional growth. Thus we had the Magna Carta for Public School Teachers in June 1996 at the heart of which is the teacher. The Professional Regulatory Commission has, by law, the critical function of supervising and regulating the teaching profession.

The present situation of basic education in the country shows that 93.33% of the teaching force in elementary education are public school teachers while 6.67% are in the private schools. At the secondary level, 72.22% of teachers are in public schools while 27.78% are in the private sector.

There are 11,283 multigrade classes handled by 19,055 teachers. Female teachers (86.64%) dominate their male counterparts. Inversely, there are more males occupying higher administrative positions.

The ratio of teachers to students is 1:56. In Metro Manila some teachers handle 80-85 students in a class during the first month of the school year.

Teacher Preparation: There are 655 teacher education institutes, sixteen of which are Centers of Excellence, one in each of the sixteen regions. They offer courses such as:

- BS Child Study for pre-primary classes:
- Bachelor of Elementary Education for elementary education classes
- Bachelor of Secondary Education with major for secondary education classes
- Master of Arts and Doctor of Education/Philosophy are offered in bigger colleges and universities

Teachers have to pass the Philippine Board Exam for Teachers (1979-94) or the Licensure Exam for Teachers (1994- to the present) in order to teach. After 1998, no teachers will be allowed to teach without this teacher qualification.

The hiring rate of pay for teachers in 1996 was P 5,300. However, with the passage of the Salary Standardization Act the lowest hiring rate was set at P8,605 plus P2,051 fringe benefits for a total of P10,656.

In the state-of-the-art review by Cortes in 1993, the following teacher characteristics were found to correlate with teaching effectiveness:

1. Graduate units and the number of units earned in the subject taught;
2. Length of teaching experience;
3. Teacher expectations of students' performance;
4. Personality traits;
5. IQ or mental ability;
6. Teacher-student ratios; and
7. Other related variables such as the salary, teacher turnover and teaching load.

The following are some research priorities which the National Educational Testing and Research Center (NETRC) is planning to undertake:

1. Teacher preparation;
2. The learning environments in high, middle and low performing schools as they relate to the teacher (using the NEAT and NSAT tests as the gauge); and
3. Monitoring and evaluation of the effects of long, medium and short range teacher development programs.

Republic of Korea

Introduction

Many important measures have been sought in the past to improve the competence of teachers through pre- and in-service teacher training. However, there are still crucial problems to be solved for the quality assurance of Korean education. Problems are created by the disparity between the expectations demanded by society for teachers to raise the educational quality, and the disappointing level of competence of existing institutions to meet changing needs.

Major Issues

As a result of increases in university enrollment and lapses in long-term planning for teacher training and recruitment policy, certified teachers, especially for secondary school, are over supplied. Under these conditions, a new teacher selection examination was initiated in 1991, which does not discriminate against candidates of private institutions comparted to those in national institutions. However, there has been criticism that important teaching characteristics are neglected in the selection process because of technical limitations in the teacher selection examination.

In terms of curricular arrangements, the differences between teacher education institutions and university certification programs is almost indistinguishable. In the case of secondary school teacher training, the trainees are not well prepared to teach integrated courses of middle school, due to the discipline-oriented approach of training courses. This situation has led to criticism, since it indicates that colleges of education, as mandated institutions, are not fulfilling their designated roles. In addition, the short period of practical training (4-6 weeks for secondary school teacher trainees) causes a lack of teacher competence in diverse teaching methods and individualized-teaching needs.

Another problem is that teachers see their profession as being of lower status compared to that of other professions. Most teachers believe they are not adequately compensated in terms of remuneration and working conditions, which then results in low teacher morale. That is, the low socio-economic status accorded to teachers influences teacher morale negatively, and may result in failing to attract bright young people into teaching.

Priority Agenda In Research And Development

The active role and high competence of teachers is seriously called upon more than ever before for building a society of "EDUTOPIA" which was set as a long-term goal for the country by the Presidential Commission on Education Reform (1995). In this milieu, KEDI, in order to seek alternative policies and measures to upgrade the quality of the teaching profession, has conducted a series of studies such as Policy Alternatives for Restructuring the Teacher Pre-service Training System in Korea (1996). Now commissioned by the Ministry of Education, KEDI is going to carry out a National Evaluation Project for Korean Teacher Training Institutions which may have a tremendous impact on existing pre-service training institutions.

In the forthcoming situation, where quality education is critically required to go beyond conventional knowledge-receptive teaching to knowledge-creating teaching, the following are deemed important as the priority agenda:

- Supporting the autonomy and self-directed problem solving of the teaching profession in improving the quality of teaching,
- Developing new teaching competencies towards knowledge-creating education,
- Monitoring the pre-service teacher training system,
- Validation of teacher selection procedures,
- Diversifying teacher certification and employment status, and
- Improvement of the welfare system for teachers.

Sri Lanka

Sri Lanka has a population that is mixed both in ethnicity and religion. The country is predominantly agricultural, and the majority lives in rural areas and plantation areas.

There are about 10,700 schools for general education for a pupil population of about 4.2 million. The minimum age of admission is 5 years. The overall span of the school is from Grade I to XIII.

The teacher population is about 187,000; and the overall pupil to teacher ratio is 24:1. In future, teacher recruitment will be strongly linked to demand and employment since the PTR must be kept to acceptable norms. This is because teacher salaries were raised recently and salaries are about 95% of the education budget.

Distance Education has been used to clear a very large backlog of untrained teachers. The effectiveness of this method appears to be mixed.

Increased feminization of the teaching force has had mixed results. Teacher deployment in remote rural areas has been adversely affected.

There are significant issues relating to teachers and teacher education. These need to be addressed through a mix of policy initiatives, regulations, structural reforms and teacher education coupled with improvements in management and resourcing.

Seven principles underlie the reforms. These pertain to:

a) System-wide and cost-effective teacher deployment policies,
b) Raising the levels of professional development and self-confidence through teacher education,
c) Maximization of the use of national resources essentially through rationalisation of the entire system,
d) Improving the cost effectiveness of programmes within institutions through better norm-based controls,
e) Standardisation of institutional arrangements and processes,
f) Co-ordination of institutional operations on a national basis, and
g) Assessment and accreditation of programmes.

Teacher Education is being reformed and restructured in conformity with a new National Education Policy. A National Authority for Teacher Education (NATE) will be established to oversee teacher education in all its aspects. The Teacher Service Institute stipulates the requirements for recruitment, promotion, upgrading and the assessment of teachers. Teachers will be enabled to obtain basic and further qualifications, acceptable PTR will be maintained, and selection criteria will be strictly adhered to.

Teacher Education programmes are being improved under the leadership of the National Institute of Education (NIE).

The reform of teacher education curricula is a precursor to the implementation of the General Education Curriculum under the new Policy Guidelines.

Ongoing R & D efforts will be required in:

fine-turning of new curricula that are being introduced,

formulation of new policies and the revision of policy,

instruction in educationally disadvantaged areas and schools,

tutoring of educational goals and strategies to meet the needs of individual children and specific groups, and

the organization and operation of small schools.

The teacher, both individually and in groups, must be actively contributing to the development of insights into all aspects of education.

Academic research has dominated the education scene in Sri Lanka. A balance must be struck between academic research and investigative research.

It may be commented that formal curriculum design and development of the delivery system in the past has failed, as evidenced by the outcomes not matching this expectations that educationists had at the outset.

Thailand

The most urgent need of educational reform in Thailand at the current time is the improvement of the quality of education, so that the education system can best enhance individual development to cope with rapid changes occurring in an era of globalisation, and to contribute effectively to the overall socio-economic development of the country.

As teachers are the key factor in quality development, they have to be adequately equipped to conduct the teaching-learning process efficiently and effectively in schools. Major problems concerning teachers and teacher education discussed are: the lack of co-ordinating mechanisms between various producers and employers; an inadequate budget allocation; insufficient professional development and the declining popularity of teaching with regard to attracting good quality persons into teaching profession, so that only students with low academic background opt to train as teachers.

These problems are so critical that any attempt at improvement in the quality of education will not be successful unless teacher education and teacher development are both reformed. The work being done by the reform committee in Thailand in this regard is widely appreciated among scholars, educators, teachers and public concerned. A report on the principles and strategies in the reform of teacher education, and teaching and educational personnel development, was approved by the Council of Ministers on 14 December 1994. At that time, five sub-committees were set up to work out a master plan with details of activities, goals and the overall budget, in relation to teacher student recruitment, the development of faculty staff specialising in pedagogy/education, the reform of the teaching-learning process in teacher training institutes, the development of in-service teacher and a public relations campaign.

To implement the teacher education reform master plan, Thai Teacher Education Institutes have developed planning and operation strategies with regard to research and development over the 5-year period of the Eighth National Education Development Plan (1997-2001). Eight main topics have been addressed:

1) Research on teacher production and utilisation,
2) Research on teaching and learning development,
3) Research and development regarding the system of the in-service teacher education programme,
4) Research and development in the system of teaching and performance assessment of teachers,
5) Research and development regarding teacher recruitment, in order to attract high potential, prospective teachers,
6) Research to promote high standards in the teaching profession,
7) Research on the evaluation and assessment processes of teachers college graduates, and
8) Research and development regarding the induction of new teachers.

NEC has responsibility for managing and following up operations in order that the master plan for the teacher education reform can be effectively implemented. In 1998, the Office of the National Education Commission (ONEC) has plans to conduct two research and development projects: first, documentary research which is concerned with innovation, coordination, participation, decentralisation and accountability to reform the conceptual model for research and development, on the new paradigm of the Thai context in teacher education; and, second, the ONEC seeks to identify accomplished teachers, by undertaking research and development on professional teaching standards.

University of the South Pacific (Fiji)

The University of the South Pacific (U.S.P.) serves 12 Pacific island countries with a combined population of 1.5 million, covering a vast area (33 million square kilometres) of island-dotted ocean. The people, land and sea are the region's key resources.

Teachers

There are 12,206 teachers in the 2,241 primary schools, and 5,747 in the 316 secondary schools. Among the challenges they face are:

h) Inadequate training: an average of 10% of primary and 24% of secondary teachers are untrained.

i) Strong examination orientation: often teachers are judged on the basis of student pass rates.

j) Lack of resources: despite those constraints, a strong commitment generally characterises Pacific teachers.

Pre-Service Teacher Education

Only 7 of the 12 countries have teacher training institutions. The U.S.P. trains many senior secondary level teachers, while others train in Pacific Rim countries.

A networking body, the Pacific Association of Teacher Educators (PATE), facilitates regional cross-fertilisation in teacher education.

Review and revision of pre-service curricula is widespread.

In-Service Teacher Education

This is widespread, especially at the primary level, but only if teachers take U.S.P. (and other) programmes, can they gain awards for in-service training.

A major regional programme, the Basic Education and Life Skills (BELS) Programme, is providing substantial professional development in classroom skills, literacy education and improving community support for education.

Research/Teacher Development

Areas of interest (to date) and priority (future) include:

4. Cultural considerations vis-à-vis the introduced western system. Helu Thaman's work has been valuable in suggesting how learning and teaching at all levels can be improved by examining Pacific-valued contexts of thinking. A related key project, to be launched in July 1997, is Pacific Cultures in the Teacher Education Curriculum.

5. Learning and Teaching Style Preferences

   Similarly, research will increase to identify Pacific students' learning and teachers' teaching style preferences.

6. Curriculum in Action

   Studies have shown that teacher development is a key to improving curriculum implementation, this being known as a result of studies of secondary and primary science, primary school and secondary English curricula in action.

7. Teacher Stress/At Risk Factors

   A further priority area is identifying factors which adversely affect teachers' performance, which jeopardise their success or continuation as teachers.

8. Action Research

   A promising beginning has been made in teacher development and improving practice by involving teachers in school-based research.

9. Student Achievement: Teacher Factors

   The BELS Programme has yielded hard data on students' literacy and numeracy achievement. Among research potential from this data is investigating teacher factors affecting their achievement.

10. Effectiveness of Pre- and In-Service Education

    Studies are needed to evaluate both pre- and in-service teacher education.

Conclusion

Research has great potential for general educational review and reform, including teacher development, in the 12 countries comprising the U.S.P. region.

Viet Nam

1. Background

Vietnam is located on the eastern portion of the Indo-Chinese peninsula. The country has a population of about 77 million, of whom nearly 80% live in rural and remote areas. The GDP per capita is about US$300.

A literacy campaign has been carried out since the Independence (1945). The literacy rate is now about 92.5%. The Universalization of Primary Education Law was announced and implemented at the end of 1991. The educational system of Vietnam comprises 12-year general education, plus 2 to 6 years higher education, and 3-year non-compulsory kindergartens. Comparing the 1991-92 school year and that of 1995-96 the enrolment in general education has increased 1.25 times and that in higher education 2.7 times.

In the period of transition there has arisen the new concept of a whole developed personality called ĐỔI MỚI. More than before, abilities in informatics and computer monitoring, foreign languages and social activities implementation, are required. Informatics and computer training for teachers is an urgent problem if education is to meet the demands of new manpower requirements.

2. Current Situation of Teaching Staff

A. Quantitative Aspect: In the school year 1995-96, there were more than 19 million students (including kindergarten students). There is a teaching staff of around 650,000 teachers. The network of pedagogical institutions comprised 81 units from provincial teacher training school (PTTS) to the pedagogical university (PU). Annually over 8,400 teachers graduate from PU and TTC, and over

13,000 from PTTS. Teaching staff in 1991 were 150 times greater than before the August Revolution of 1945. However, due to the rapid expansion of primary education, over 57,000 teachers are still required.

B. Qualitative Aspect: In the past ten years of ĐỔI MỚI, teacher training has been upgraded by different measures, such as:

Implementation of a new curriculum at the collegiate level, for kindergarten and primary teachers;

Development of multilevel forms in some universities and colleges that meet the demand of various levels of training in the one institution;

Enhancement of the in-service training that was oriented to standardization, continuing and updating education and professional development;

Integration of scientific research in the process of training;

Enhancement of the infrastructure and facilities in order to renovate the pedagogical environment. At the end of 1992 the project "Including Informatics into the General Education Curriculum" was launched. Over a thousand computers were supplied to schools for the new project "Informatics". Twelve primary schools are experimenting with computers as a modern means of innovation in teaching-learning methods.

2. Main General Policy in the Development of Teachers

A. Main General Policy: Based on the concept "A man is an objective and at the same time a motive force in the socio-economic development process of the society", we consider that human development (and more concretely: man-power development) is a fundamental element for the fast and sustainable development of the society; and that human development is a decisive element for all development processes. Therefore, training good teaching staff is a first priority of education.

B. The National Institute for Educational Science: With regard to teacher education this provides for:

1. Development of the new curricula for teacher training institutions (universities, colleges, schools);
2. In-service training for standardizing and upgrading the teaching contingent;
3. Renovation of teaching-learning methods in order to develop all students' potential capacities;
4. Development of the traditional-modern teacher personality;
5. Continuing professional development of teachers for the society into the 21st century; and
6. Ways of improving the salaries and living conditions of teachers.

Chapter 3: A Future Research Agenda for Teachers, Teacher Education and Development

This chapter has three parts. The first is a framework for determining and discussing research priorities; the second part contains papers presented by those members who participated on the panel; and the third reports on group discussions focussed on priorities for collaborative research in the region. A summary of priorities finally agreed for regional collaborative research is presented in the conclusion (Chapter 5).

Part I: A Framework for Discussion

Introduction

"Member states at both MINEDAP VI and EDCOM noted that [a] crucial challenge ... is to recruit, train and retrain competent teachers (since teachers are the main agents of change). ... EDCOM specified that as countries seek to re-engineer, strengthen and upgrade their education systems, special attention should be given to the pivotal role of teachers in the process of educational improvement and transformation.

> "APEID programme actions in teacher education will fundamentally focus on two requirements, namely:
>
> Effective and quality-based teacher training programmes for new teachers, using a variety of methods; and
>
> Upgrading the knowledge and skills of current teachers on a continuing basis, utilizing a variety of methods." *Work Plan of APEID for Sixth Programming Cycle, 1997-2001* (1997)

Synthesis of Country Papers: Main Themes

Six broad areas emerged from an analysis of country papers:

1. Priorities for research on teachers
2. Priorities for research on pre-service teacher education
3. Priorities for research on in-service teacher education
4. Suggestions for system-wide research
5. Regional, comparative or co-operative research
6. Approaches to research

1. Priorities for research on teachers

A very wide range of topics was suggested or described as happening.

However, some topics were suggested by, or are being researched in, several countries. Many fit under a general question:

"What is the ideal teacher?"

1.1 Explorations of why some teachers perform better? - the correlates of teacher effectiveness.

1.2 Studies of teaching and learning styles and processes with a view to modifying training and improving practice.

1.3 Studies of preparation and skills needed for multi-grade and multi-subject teaching.

1.4 Studies of teachers' characteristics, psychology, interests and attitudes.

1.5 Studies of teachers' involvement in, and as role models for, students' ethical and moral development.

1.6 Studies of teachers' status, qualifications, pay and conditions, workloads and stress, and so on - usually linked to trying to improve recruitment to, and the attractiveness of, the occupation/profession.

1.7 Surveys of teacher supply and demand, including by location and by subjects.

1.8 Studies of innovations and their implementation in classrooms, including teachers' autonomy, empowerment and recognition.

1.9 Studies of the influence of the media on teachers.

2. Priorities for research on pre-service teacher education

A strong consensus as to the priority emerged in this area. A central focus was summed up by the key question "What works?"

This topic was expressed in different ways, such as:

- evaluation studies of different programmes,
- strengths and weaknesses of alternative approaches and programmes,
- the relationship between school or student performance and teacher preparation and professional development.

There are some specific concerns within this priority area for research:

2.1 What variables in teacher education make a positive difference for effective teaching and learning, e.g.:

- programme structures,
- curricula,
- length,
- approaches to on-site (school-based) practice,
- improved tertiary teaching approaches used by teacher trainers,
- modifying teacher education curricula to suit different cultures.

2.2 Monitoring the efficiency of teacher training institutions.

2.3 Evaluation of new initiatives/reforms.

2.4 What teacher education works best for enhancing the participation and achievement of girls and boys, and/or of minority groups?

3. Priorities for research on in-service teacher education

What is meant by in-service teacher education can differ in different countries. It can focus on training unqualified teachers who are already in-service, or it can focus on the continuing education of trained and qualified teachers, or it can focus on both.

One topic was mentioned by the majority of countries, this being:

3.1 What is the impact of different in-service programmes on enhancing the effectiveness of teaching and learning?

Some other priorities included:

3.2 Needs analyses for in-service teacher education (for up-grading and/or for their continuing education).

3.3 Studying the nature and extent of in-service teacher education, and analysing participation in it.

3.4 What are effective ways for improving or increasing the teaching of particular subjects?

3.5 Evaluating the use of different modes of in-service teacher education, including information technology and distance education.

3.6 Evaluating any correlations between incentives, and participation in and effectiveness of in-service teacher education.

4. Suggestions for system-wide research

4.1 Studies of the links between pre-service teacher education, and in-service teacher education.

4.2 A macro-level study of the different variables which affect teacher performance, including such variables as:

- pay levels,
- recruitment and selection criteria,
- placement of teachers,
- teacher education approaches, including assessment,
- teacher appraisal,
- merit awards/promotion systems,
- employer/teacher relationship: eg. determining pay and conditions.

4.3 Studies of teachers, teaching organisations, and teacher education institutions work together to achieve common goals?

4.4 Document what is involved in (re)formulating a development plan for teachers, teacher

education and the professional development of teachers.

5. Regional cooperative/comparative research suggestions

The following suggestions emerged from paper and discussion of the draft framework. Additions were made later in the meeting (refer to Chapter 5).

5.1 The effects of economic transitions on teachers and teacher education.

5.2 Norms used to calculate supply and demand figures.

5.3 The educational qualification bench-marks deemed necessary for effective teachers, and the bases of these decisions.

5.4 The effects of policies used to attract teachers to work in remote locations.

5.5 Different systems for teaching practice during pre-service training.

5.6 Approaches to distance education for the continuing education of teachers.

5.7 Teachers' attitudes, interest in self-learning, enjoyment of their work.

5.8 Multi-grade teaching.

6. Suggested approaches to research

6.1 Action research which involves teachers, pre-schools and schools, and communities as researchers.

6.2 Macro-level projects to gather statistics.

6.3 Surveys.

6.4 Case studies to examine why something is effective.

Part II: Panel Presentation Summary

The following sections were presented by members from 6 countries.

CHINA

The following topics are offered as an agenda for future research on education.

1. The impact of structural adjustment on teachers, teacher education and teacher development.

   - What is the impact of structural adjustment in a transitional economy? (There are several Asian countries undergoing often rapid transition to a market economy. Their teacher education systems face common problems such as: the low efficiency of educational institutions, structural rigidity, inefficient management systems, the pedagogical emphasis on "fixed" knowledge rather than "dynamic skills".
   - What is the impact of structural adjustment on teachers' pay, employment and working conditions, (including salaries, teacher shortage and surplus, teacher recruitment and qualification requirements, the employment of female teachers, and similar questions)?

- What is the role of public policy in enhancing the professional status of teachers to ensure an adequate supply of qualified teachers to meet future educational needs?
- What steps should be taken to ensure the recruitment of high quality individuals into teaching and to retain them?

2. The desirable measures to best meet the needs of teacher training (including financing and the roles of teacher training institutions).

3. The relationship between educational funding policies and teacher training (including decentralization which has to increased spending on education, privatization which has increased in many Asian countries, and regionalization which has occurred in China especially).

4. The relationship between global curriculum reform and teacher training

- Theory and practice: emphasizing science and research while improving pedagogical practice in schools.
- Content-mastery of core knowledge: emphasizing the potential role of teachers as innovators and motivators.
- Context: emphasizing "problem-solving" types of instruction.

INDONESIA

A. Background

Teachers are a key factor in determining educational quality and human resource development. Considerable effort has gone into improving teachers' performance but many problems remain to be addressed.

Despite the amount of research completed, little has been devoted to widening the knowledge base or to assisting in policy or decision making.

B. Areas to be researched

The areas to be researched have been grouped under three categories with a listing of appropriate research topics.

1. Current teachers

(a) The management of teachers

Research is required into the uneven distribution of teachers in terms of supply and demand, the mismatch between educational backgrounds and the subjects being taught, and the supply of reliable data on teachers.

(b) Teacher quality and qualifications

Research is needed into the minimum competencies required of teachers for primary, general and vocational secondary schools, and the qualifications which guarantee the acquirement of these

competencies.

(c) Teachers' conditions of service

Research needs to be conducted which will lead to teaching being regarded as a "respected occupation" attracting the most able and suitable candidates. This research would focus on:

- the status of teachers,
- teachers' career paths which would allow for advancement,
- teachers' welfare, including salaries and pensions,
- professional development which supports teachers and enables them to keep up to date.

2. Pre-Service Training

With regard to pre-service training the following areas need to be researched and developed

(a) an effective system of teacher training/education

Assuming that the minimum competencies required for teaching are known, the question to be asked is what kind of training or education best enables teachers to develop these competencies. This would require an examination of such factors as the length of training, the curriculum, etc. The main issue is what kind of curriculum and teaching-learning, including practice teaching, would best enable teachers to obtain the required competencies.

(b) Management of teacher supply

Criteria should be developed to select teacher training institutions which can be given responsibility for the education of teachers. A general rule should be no over or under supply of teachers nor should there be underutilization of teacher training institutions or resources for this purpose.

(c) Impact of pre-service teacher education and cost-benefit analysis

Research is required into the impact of various pre-service training programs (both current programs and more longitudinal studies). Cost-benefit analyses should be made of training programs including their cost effectiveness in terms of both the students and the government.

3. In-Service Teacher Training Programs

(a) The effectiveness of various training programs

Studies on this topic must include: needs assessment, evaluation systems being adopted, the impact on teachers, (teachers' knowledge, skills and attitudes) and costs.

(b) Management of teacher training programs

This topic includes research on co-ordination among institutions involved in training programs, the recruitment of teachers, the scheduling of training in relation to trainees' available time, logistical matters such as the place of training, costs etc., and follow-up action.

(c) Methodology

Research on teaching should utilize various methodologies such as documentary, qualitative and quantitative studies

IRAN

A. Priority Research Topics

1. Teachers Performance Evaluation

Education is regarded as the "magnet of attention". That holds true for teachers. How teachers' performance is evaluated, therefore, has a great impact on their professional behaviour. The question that needs to be addressed in this research is whether the evaluation scheme reflects the spectrum of expectations that teachers are held accountable to. In other words, are the evaluation schemes valid in the light of our vision of an effective teacher? In addition, questions of data collection procedures and data sources must be addressed.

2. Teachers' Psychological State

The hidden aspects of the professional life of teachers must be properly investigated. Such an investigation enables policy makers to address the concerns and needs of working teachers more effectively. This area seems not to have been adequately investigated in the past.

Questions such as how teachers feel about their profession, how they perceive of themselves as teachers, whether they feel abandoned and helpless, how they feel about their students and the curriculum they teach, are valid question to be addressed in such an investigation.

3. Induction Programs

Beginning teachers are generally more insecure and vulnerable than other teachers. If special attention is not paid to their concerns, needs and interests, the likelihood of their leaving the profession is relatively high. Induction programs are built to induct the beginning teacher into the profession. Such programs should be regarded as the mediating program that stands between pre-service and in-service programs. It should, therefore, be regarded as an important phase in the process of teacher development and receive attention comparable to other phases in the process.

4. Investigation of the Practicum Component of Pre-service Teacher Education Programs

Practise teaching can be studied from many different angles. The proposal here, however, is to examine this crucial element of teacher education programs from the perspective of whether it is conducive to training teachers who are reflective practitioners.

This study can be expanded to include all professional development courses offered to future teachers (and, of course, its implementation) to see if it adequately emphasizes the role of teachers in creating professional knowledge. Is the program sympathetic to the cause of training teachers in whom experimentation in the process of carrying out their responsibilities is reinforced as a norm? What are the real opportunities provided to meet this end?

5. Moral and Ethical Development of Students

This investigation aims to find out the extent to which teachers are fulfilling their responsibilities as major players in the realm of the moral and ethical development of students. Research can hopefully shed some light on the inhibiting factors and also ways to improve the current state of affairs.

6. Examination of the Instructional Theory Behind In-Service Teaching

This investigation aims at defining an optimal instructional model for in-service purposes. It does not involve an investigation of the effectiveness of different delivery systems. But it very specifically looks at the issue of the proper teaching strategy which is most susceptible to result in transfer of learning. For example, does the concept of coaching have any validity in this respect (peer-coaching or otherwise)?

B. Joint or Comparative Studies

1. The teachers' role in the ethical and moral development of students.

2. Induction programs.

3. Teachers' performance evaluation schemes.

C. Research Approach

Action research must enjoy more attention in the future compared with the past. This is a paradigm in which teachers, either individually or collaboratively, assume the role of producers of relevant professional knowledge, while in the academic research paradigm, they are looked upon primarily as loyal consumers of knowledge. Education, after all, is by its nature so delicate and complicated an enterprise that the mere execution of directives emanating from academic research does not guarantee that effective learning will take place.

The school principals' role as change agents is of vital importance in this regard too.

Their attitude towards change and innovation literally determines the extent to which teachers will exhibit innovative behaviour. The performance evaluation scheme again, and the role principals play in it, need to be examined carefully.

Lao P.D.R

Introduction

Over the past sixteen years, there has been quantitative growth in Lao P.D.R's education sector. At present 80 percent of 6 years old children enroll in primary school.

The expansion of the education system that has occurred has been at the expense of its quality. In 1987-93, 35 percent of primary school teachers, 14 percent of lower secondary school teachers and 17 per cent of upper secondary school teachers were either insufficiently qualified to teach at their current level or were untrained of the curriculum in schools at all levels and teachers training colleges need updating to make its more relevant to the country's present needs. The extreme shortage of instructional materials implies the lecture method is predominantly the only one used.

Based on these issues, the Ministry of Education, in 1992 made the following recommendations:

- create the conditions for UPE by the year 2000
- improve the quality of teachers
- reform the curriculum
- provide good and adequate curriculum materials.

On the basis of the above recommendations, the National Research Institute for Education Sciences has conducted two main research areas namely:

- research on curriculum reform and curriculum materials development for primary and lower secondary schools
- research on teaching methodology for ethnic minorities teaching-learning process.

Future research agenda

Teacher education, curriculum and curriculum materials development are three interrelated areas that have direct effect on:

- improving the quality of education, especially increasing the internal efficiency of the education system.

In order to bring this matter to a successful issue, the urgent priorities of the Ministry of Education in terms of future researchers could be listed as follow:

i- Upgrading of qualifications of untrained teachers

ii- Teacher Education for Ethnic minorities and women-

iii- Strategies to increase participation in schooling for ethnic minorities children and disadvantage children in remote and isolated areas.

iv- Standardization of pre-service curriculum and programmes (reform of pre-service curriculum and programmes).

Philippines

1. Priorities for Research on Teachers

The Profile of Teachers in High, Average and Low Performing Public Schools in the Philippines: Inputs to Teacher Education and Development Program

The significance of the results lends heavily on the identification of distinguishing characteristics of teachers in high, average and low performing schools as inputs to in-service training and development of teachers especially those new or in-coming teachers. The results can also serve as baseline data in structuring pre-service education programs to include development of the personal attributes and characteristics of teachers in high performing schools.

2. Pre-service Teacher Education

Teaching Preparedness of Graduating Student-Teachers in Elementary Schools: Bridging the Gap in Pre-service and In-service Education

A norm-referenced assessment tool/scale will be developed by master teachers, who were noted to be effective teachers before they were promoted. This research tool will cover the qualities of a good and effective teachers as defined by them. The norm for a new teacher or graduating student-teacher would be the teaching capability of an average teacher with teaching experience of three years.

The qualities to be addressed by the norm-referenced assessment scale would focus on: How effective is the student-teacher in her teaching? This will be provided by her co-operating teacher in her student-teaching performance. Based on this assessment, the final question to be addressed would be: Is there a need to streamline pre-service theoretical education curriculum to increase some time for student-teaching and classroom observation in usual school settings.

3. Priorities for Research on In-service Teacher Education

Monitoring and Evaluation of Effectiveness of the Long Term, Medium Term and Short Term Training Program of the Program for Basic Education (PROBE)

Basic education is a new and developing structure of the Philippines educational system. In order to provide a continuum of teacher development in the elementary and secondary levels it is initially undertaken through the Program for Basic Education (PROBE). Teachers and supervisor are sent to Australia to undergo training on mathematics and sciences and on information technology, monitoring and assessment different program packages categorized by length of training. Those who attend this training package serve as trainers after the training. The effectiveness of their training will be gauged on as the number of training and the number of teachers trained in addition to the implementation of the teachers trained by them in their respective subject area of concern.

The results will be categorized according to the training package or the length of training.

Thailand

Future Research Agenda on Teachers

The Master Plan of Teacher Education Reform was approved in March 1996 by the Council of Ministers which also authorised the establishment of a special project for the implementation of the reform. Accordingly, the Office of the National Education Commission (ONEC) has established the Teacher Education Reform Office (TERO) to take responsibility for managing and following-up the operations in order that the master plan for the teacher education reform can be actually implemented during the period of the Eight National Education Development Plan starting in 1997.

Of the strategies in the Master Plan of the Teacher Reform, namely student-teacher recruitment, development of faculty staff specialising in pedagogy/education, reform of the teaching-learning process in teacher training institutes and in-service teacher development, the most important is to reform the teaching and learning system, because it can have a multiplier effects on all strategies. So, the ONEC has launched a project for teaching-learning development in order to search for new methods of learning and provide suggestions for the improvement of educational quality in 1997. The project has been analysing and suggesting basic concepts for the teaching-learning process such

as the following:

- The most important element of teaching is learning,
- Learning occurs at any time, anywhere and is lifelong,
- The learning atmosphere is an essential element of good teaching,
- The learner learns best by doing and interacting, and
- The outcome of learning is an integration of knowledge, thinking, skills and morality.

The research proposed five theories of learning methodology: 1) Happy Learning, 2) Participatory Learning, 3) Thinking Process, 4) Aesthetic Value Development and 5) Moral Value Development.

For the implementation of this project, as a way towards improvement of the quality of education, the following strategies have been decided by the ONEC:

1) Coordinating and cooperating with the agencies involved: the Ministry of Education; the Project for Teaching-Learning Reform of the Office of the National Primary Education Commission; Educational Reform Office; Department of Curriculum and Instruction Development; Department of General Education; and the Office of the Private Education Commission, Department of Education, Bangkok Metropolitan Administration, Bureau of Local Education Administration, Department of Local Administration, Ministry of Interior.

2) Coordinating with experts on theories of learning who have been commissioned for the presentation of theories and practices in the development of the learning process according to various concepts and theories. Stages of the teaching-learning process have been clearly presented, together with training packages for educational supervisors, administrators and other key personnel involved in the improvement of the teaching-learning process.

3) Coordinating, contracting and establishing conditions with teachers to do the research on teaching and learning development.

Following-up, monitoring and networking for all of the research and development projects, to develop the learning models in accordance with the basic concepts for teaching-learning process.

Part III: Priorities for Collaborative Research

The meeting divided into three groups to discuss priorities for collaborative research and reported to a plenary session of the meeting. The discussion in each panel is summarised below and a table of priorities and interests presented.

Group A

Group A discussed the research suggestions in part 5 of the framework. It suggested changes to the wording of 5.1 and 5.3 and proposed a new item, 5.9. These changes are as follows:

5.1 The effects of changes in economic conditions on teachers and teacher education;

5.3 What is an effective teacher? For example, what competencies are deemed necessary for teaching; what qualifications are required?

5.9 The evaluation of pre-service and in-service teacher education programmes.

Members of the panel ranked the nine suggestions in terms of their countries' priorities. The priority areas selected were:

5.2 norms used to calculate supply and demand figures;

5.3 what is an effective teacher?

5.4 policies to attract teachers to work in remote locations; and

5.9 evaluation of teacher education programmes.

Of these, 5.3 and 5.9 were the preferred topics. If pressed to nominate one topic for the next meeting that on evaluation (5.9) was preferred but both evaluation and competencies were regarded as cognate areas for the theme of a meeting.

This group was of the opinion that meetings should be held annually and should be into concentrated five days, particularly, if directors of Institutes were likely to attend. On participation, the panel was agreed that either directors of research institutes and principal investigators of projects should be invited to attend. If a country were to send both, it would have to meet the cost of one participant. All members of the group - China, Indonesia, Sri Lanka and U.S.P. (Fiji) - were happy to host a future meeting.

In the group discussion two further matters were raised. The first was that some research had been or was being undertaken in some countries; the second was the need for dissemination of research both in terms of finding and databases.

Group A felt that next meeting should focus on research recently conducted in at least one of the priority areas decided on for collaboration.

Group B: Priority areas of research

The group added two topics to the list of suggestions for regional collaborative research:

5.10 Policy and practice for the induction phase for beginning teachers; and

5.11 Teacher appraisal systems.

Modification of the wording of two suggestions in the framework was also proposed for two topics:

5.3 The educational qualification bench-marks and other qualifications deemed necessary for selection to teaching and for effective teachers; and the bases for these decisions;

5.4 Policies used to attract teachers to work in remote areas.

Participants listed four priority topics, in rank order. The results were as follows:

First priority	5.8	Multi-grade teaching.
Second priority	5.5	Different systems for teaching practice;

Third priority	5.3	Educational and other qualifications bench-marks needed for effective teachings;
Fourth priority	5.4	Attracting teachers to remote areas;
	5.6	Approaches to distance education for the continuing education of teachers;
	5.10	Induction phase;
	5.11	Teacher appraisal.

It was suggested that Directors meet every alternate year. The topics proposed were:

a) reporting back on any regional collaborative work undertaken as a result of this regional meeting; and/or

b) in-service teacher education; and/or

c) elementary education; or

d) upper secondary education

It was also felt that project co-ordinators of any collaborative research would need to meet at least twice-yearly or annually depending on the topic, research objectives and design of the research.

Group C

Panel Three selected three topics that are listed below to be given high priority for comparative research. They were paragraphs 5.4, 5.1, and 5.5 in the framework proposal. A brief discussion was held on each, which is summarised below:

I. The effects of policies used to attract teachers to work in remote locations

Posting new teachers to remote areas presently involves:

- New graduate teachers posted for three years;
- Teachers who are posted to remote areas are given hardship allowances;
- Teachers are encouraged to serve more years in the remote and isolated areas.

The question here is whether these strategies are effective enough to attract teachers to work in these areas?

II. The effects of economic transition on teachers and teacher education: problem areas

1) Government increases teachers' salary in order to attract more bright students to join the teaching profession;

2) In some countries teachers feel that they receive small salaries compared with the contribution they make;

3) Roles of teachers' unions involving bargaining power;

4) The question of what is the optimum level of teachers' salaries in accordance with economic

development. Many factors should be considered in order to increase teachers' salaries such as:

- the inflation rate, and
- the impact of the salary on teacher services.

5) Governments have to make decisions on the distribution of national resource and to determine what kind of salary schemes for teachers should be used compared to other sectors in public service.

   a) the professional development of teachers;
   b) policy legislation;
   c) pre-service and in-service education;
   d) enrolment trends for the teaching education;
   e) political interests and the teaching relationship.

6) With regard to teacher and teacher education, consideration should be given to the following critical aspects:

III. Different systems for teaching practice

1) Duration of training and the structure of the programme;
2) Duration of internships and the roles of experienced teachers in supervising teacher trainers in peer coaching systems;
3) Teaching practice and curriculum reform.

Panel three suggested that meetings of directors of educational research institutes should be held every two years i.e., that research projects run for two years and a meeting be held on their completion.

This panel proposed as the topic for the next meeting, "Upgrading the Teaching Profession".

Part IV: Summary

In order to provide a summary, composite picture of the existing and future research priorities of countries, participants were asked to provide their suggestions regarding priorities for regional co-operative/comparative research. They were asked to indicate, for each of these priority topics, which ones had already been researched, which were worthy of future research, and for which of these topics countries would like to share/exchange information on existing policy areas. A summary of countries' responses is provided in Table 1.

Table 1: Consolidated List of Research Priorities

	Priority Research Area	Research Completed	Needed Research	Exchange of Policy Information
5.1	Impact of economic factors on teachers and teacher education	China	China; Japan; Malaysia; Philippines; Republic of Korea; Thailand; Viet Nam;	China; Indonesia; Iran; Malaysia; Laos; New Zealand; Papua New Guinea; Philippines; Sri Lanka; U.S.P. (Fiji)
5.2	Determining teacher supply and demand	China; Japan; Malaysia; Philippines; Sri Lanka	China; Japan; Republic of Korea; Sri Lanka; Thailand; Viet Nam	China; Indonesia; Iran; Laos; New Zealand; Papua New Guinea; Philippines; Sri Lanka;
5.3	Characteristics/competencies of effective teachers	Japan; Laos; Philippines	China; Indonesia; Japan; Sri Lanka; U.S.P. (Fiji);Thailand	China; Indonesia; Japan; Sri Lanka; U.S.P. (Fiji)
5.4	Teachers working in remote areas	Laos	Viet Nam	China; Indonesia; Iran; Laos; New Zealand; Papua New Guinea; Philippines; Sri Lanka; U.S.P. (Fiji)
5.5	Models for teaching practice during pre-service training	U.S.P. (Fiji); Philippines	Japan; Malaysia; Philippines; Republic of Korea; Thailand; Viet Nam	China; Indonesia; Japan; Sri Lanka
5.8	Multi-grade teaching	China; Indonesia; Malaysia; New Zealand; Philippines; Republic of Korea	Philippines; Sri Lanka; U.S.P. (Fiji); Viet Nam	China; Indonesia; Malaysia; Sri Lanka; U.S.P. (Fiji)
5.9	Most effective pre- and in-service teacher education	Japan; Malaysia; New Zealand; Philippines	China; Indonesia; Japan; Philippines; Republic of Korea; Sri Lanka; U.S.P. (Fiji);Thailand; Viet Nam	China; Indonesia; Japan; Malaysia; Sri Lanka; U.S.P. (Fiji)
5.10	Teacher induction	Japan;	U.S.P. (Fiji)	China; U.S.P. (Fiji); Indonesia; Sri Lanka
5.11	Teacher appraisal	Malaysia; New Zealand; Papua New Guinea; Philippines	China; Indonesia; Japan; Republic of Korea; Sri Lanka; U.S.P. (Fiji)	China; Indonesia; Japan; Sri Lanka; U.S.P. (Fiji)

Chapter 4: Educational Research and Educational Policy Making and Decision-Making: Implications for Teachers, Teacher Education and Development

The first part of this chapter contains the papers presented by members of the meeting who comprised the panel for this discussion. The second part is a report of the discussions and recommendations arrived at the meeting.

Part A: Panel Presentation Summary: Relationship between Educational Research and Decision-Making

Japan

Introduction

Research on teachers and teacher education has been largely unsuccessful in influencing the decision-making process in Japan for reasons mentioned in the Country Report.

1. Negotiation of Education Budget

Research with persuasive power is necessary for both MONBUSHO and local Boards of Education, not only when they compile their education budget, but also when they negotiate with the financial sector such as the Ministry of Finance. But, regrettably, there are few such research studies.

In Japan, few studies have been conducted on the relationship between decision making and research.

2. Examples

There has been a recent case where the suicide of a boy due to bullying immediately led to the improvement of teacher arrangements. This was because of public and journalistic criticism that was raised against not only schools and teachers but also the Government. As a result, school counsellors are to be appointed to each school to help address this problem.

Most teachers wish to reduce class size from 40 to 30 pupils per classroom. But research has never been able to clarify what is the most effective class size in Japan.

To stress the 'practical' is too narrow a concept to apply to the teaching profession if it is to produce effective teachers. The effective teacher is a person with 'the qualities and the abilities to identify problem areas for himself/herself, to learn, think, make judgements and act independently and to be more adept at problem-solving", and who has "a rich sense of humanity", as mentioned in the report of the Central Council for Education of Japan.

3. Some Other Considerations

The teacher is like most other people in society, not a superman or a superwoman. If they are overburdened they are subject to stress and burnout. Teacher education programmes do not

necessarily promote teacher development, but can often encourage the serious or conscientious teacher to overwork and to burnout. It is thus important to be realistic regarding what we can and should expect of our teachers. There are three problems to be confronted:

1. what the teacher is able to perform;
2. whether he/she has performed what he/she is expected to do, according to his/her abilities; and
3. how to best support their performance.

Many problems which Japanese teachers see each day, such as juvenile delinquency, examination hell, poor human relations including bullying, are social in origin, before they become educational problems. These problems are partly the result of modernisation in Japan since the Meiji era. It could be said that present day teachers are being expected to shoulder an excessive responsibility to correct mistakes that have occurred in the process of Japanese modernisation. Yet, many teachers feel powerlessness or helplessness in shouldering such responsibilities, due to the stress involved in trying to meet such expectations. Thus the risk of burnout amongst Japanese teachers is very high.

Malaysia

1) Findings of research on teacher and teacher education can be effectively used as a soft-tool to facilitate educational planning and informed decision making process, especially in helping decision makers in:

   a) Getting a clearer picture of the past events/trends of teachers, teacher education and teacher development.

   b) Exploring and identifying "areas of darkness" or "grey areas" that exist regarding many aspects of teacher and teacher education – both for in-service teachers and teacher trainees at various teacher training colleges and universities.

   c) Gaining new knowledge and in-depth understanding of the existing phenomena, particularly those related to the teachers' professional and personal development, teachers' needs, teachers' welfare and teachers' socialization.

   d) Forecasting future needs and requirement regarding teachers and teacher education.

2) To be policy-oriented research: that is, its findings can be used for the purpose of the planning and decision-making process, research on this area must have sound and focused research problem(s). In order to convince grant-providers research problems, or commonly known as statement of problems, in any research, proposals should be:

   a) written, based on a strong theoretical and practical conceptual framework.

   b) written and presented in a measurable, researchable, and manageable way.

   c) focused on specific issue(s) regarding teachers, teacher education and teacher development.

   d) able to be directly translated into research questions or specific subjects.

3) For a macro-level research, it is prominently important to determine that it fulfils the following

requirements:

a) It uses a strong and sound research design,

b) It is conducted with the involvement of a sufficient number of samples and using reliable methods of sampling for generalization purpose,

c) It uses multi-method data gathering,

d) If possible, it is better to have multi-level data analysis, and

e) It is "timely".

4) To persuade decision-makers to "buy" and use the findings of research in this area, it is important to inform them that:

a) Research is conducted based on concrete and sound research problems. Those selected problems are identified to have significant linkages with teachers and teacher education.

b) Research findings or information gathered through research work are valid and reliable.

c) Research findings give them the true picture of various problems and the needs of teachers.

d) Recommendations that are outlined or proposed based on the research findings are applicable and feasible.

e) "Timely".

Philippines

For the purpose of a common understanding, educational research is defined as the systematic, designed and critical generator of new knowledge concerning the presumed relations among educational factors and problems and/or the revision of accepted conclusions, theories or laws in the light of newly discovered facts. This definition is being adopted in this paper considering that a relationship is to be established between educational research and policy/decision making. Besides, it is often misunderstood that educational research is any activity aimed at gathering or collecting data and information about people, situations and phenomena. Our concern, therefore, is the improvement of the quality of education and, therefore, research is necessary as a basis for educational planning, educational policy formulation and educational reform. Under this concept, education can be conceived of as both a process and a product. As a process, education happens in both school and non-school settings. As a product, it refers not only to immediate changes and gains in cognition, attitudes and skills that occur in students as they go through the process but also the long-term consequences for the individual and his/her community.

The present concerns of the Philippines government about efficiency, effectiveness, and equity in education have led to more systematic and controlled research studies on school performance which in turn has triggered efforts to develop measures and indicators of efficiency and effectiveness of the school system.

One research study by a doctoral student in the University of the Philippines, which triggered serious concern, involved a worker in the shoe industry who has completed only high school but is more productive than one who has gone through college. It was found that college education is negatively associated with productivity. Some more recent studies in the country have shown that

education appears not to be paying off especially when we consider the phenomenon of the "educated unemployed" in the Philippines. We have a lot of college graduates who turn out to be taxi drivers, factory workers, sales ladies and domestic helpers.

The results of the National Elementary Achievement Test (NEAT) and the National Secondary Achievement Test (NSAT) are more simple illustrations of the relationship between educational research and policy/decision-making. After getting the results of the two tests, a Regional Director met and challenged his constituents because they ranked amongst the lowest. He monitored them closely with the Superintendents and Supervisors. The succeeding year found them among the top performing regions.

In this case the action on the decision to challenge the school officials and teachers in the region to teach better, and the pupils and students to learn and perform better, was a result or an off shoot of the poor result shown in the test. The decision depended in the result of the tests which were the measures used in the research.

These few studies and observations illustrate the relationship between educational research and policy/decision-making. We still expect to have more organized educational research not only because of the growing complexity of the contexts in which educational process is occurring but in view of the need for valid and reliable knowledge about this process in diverse and unique situations, and for other purposes such as educational planning, curriculum assessment and improving the quality of student learning.

Republic of Korea

Nature of Research

Educational researchers tend to develop new concepts, new alternatives in practice, critical perspectives, and new insights and visions concerning what education (teaching) is. The world which researchers are mainly concerned with is not the world of reality but that of ideas. The ultimate value of research is in its earnest findings which can help us understand what competent teachers are and how we ensure highly qualified teachers for our schools. Good researchers are refining, or changing, our conceptual framework of the world and ourselves.

Nature of Decision-Making

Decision-making involves a choice among competing values, ideas and approaches in the context given. The choice means a commitment to a certain conceptual framework or value system. Decision-making aims at changing the reality. Changes such as a new policy on pre- and in-service teacher training, changing teachers' working conditions, adopting a new merit system for teachers, application of new teaching models etc., imply decision-making by the policy makers and teachers concerned.

Some Dilemmas of Educational Research in the Context of Decision-Making

Good researcher contributes to informed decision-making by policy-makers and teachers as well as by providing grounded information. However, there are some dilemmas for researchers to be aware of. First, researchers are not likely to make a value judgement while decision making deals heavily with matters of value. The major role of researchers is in creating valid and reliable information.

Second, educational researchers need time to obtain valid findings, especially on the effect of educational content and method on students, while decision-makers call for educational problems which are imminent, to be solved here and now. In many cases hastily and fragmented decision-making without sound information creates another problem. Third, sometimes it is inevitable for researchers to be critical of the existing procedures or institutions for their low efficiency or malfunction. This may create a tension between researchers and those who have vested interests with the status quo.

Cooperative Relationship in Tension

One hypothetical assumption about the relationship between educational researchers and decision-making is "cooperative relationship in tension". The full cooperation of researchers for sound decision-making is necessary and desirable. In order to build this cooperation, research is encouraged to be conducted free from any possible oppression of existing institutions. Researchers are critical enough to evaluate existing practices including their own from the view of "third eyes". Decision-makers should respect the evidence and information provided by researchers. An open discussion with the participation of stake-holders across a wide range is a necessary step prior to making a final decision especially in making new policy.

University of the South Pacific

Introduction

There is undoubtedly room for improvement in the carrying out and use of educational research to inform and enhance educational decision-making in the 12 countries served by the University of the South Pacific (U.S.P.).

However, we must acknowledge that decision-making is affected by other factors, some of which are unavoidable realities.

Also, the planning and implementing of appropriate research often involves considerable time and expense, two scarce resources in small island states, where educators usually fulfil multiple professional and societal roles.

However, promising beginnings have been made, especially in recent years, in conducting appropriate research and in using the results to improve educational decision-making.

Factors Other Than Research which Affect Decision-Making

We need to bear in mind that results of research are only one of several factors which affect educational decision-making. Indeed, by bearing there factors in mind, we can make better recommendations. These factors include:

- Political: Our Permanent Secretaries are answerable to their Ministry of Education and hence to the government. Government priorities may quite legitimately conflict with research-driven recommendations.
- Economic Factors: Obviously we must bear these in mind when recommending educational reforms. A Book Flood Research Project (Elley and Manguhhai, 1980) is a case in point.

- Aid agency priorities and operational guidelines
- Global trends which may not match our local needs but our countries are influenced by such trends.
- Public pressure: It is sometimes difficult to implement research-guided reforms because of resistance from the public. An example was the Tongan Ministry of Education's desire to delay the introduction of English in primary schools and strengthen Tongan language education in 1985.

Assumptions Hindering Research

Education is fraught with assumptions, some of which hinder research. For example, it is assumed that:

1. A person who has graduated from a teacher training institution is a well-trained teacher. The need to evaluate the training has only recently been acknowledged in our region; and
2. In-service courses will improve classroom practice. Again, the need to evaluate in-service training has only recently been seen as important.

A Successful Initiative From Which Strategies can be Derived

The data produced by the Pacific Islands Literacy Levels (PILL) testing of literacy and numeracy achievement of all children after 4 (PILL One) and 6 (PILL Two) years of schooling has led to promising developments.

The basic findings of the initial (1993 – 1996) round of testing were:

- 20% of the cohort were deemed 'at risk' (of failing to benefit from further schooling) in vernacular literacy and in numeracy.
- 33% were deemed at risk in English literacy.

The testing was government-ministry initiated. Initial reactions to the results included disbelief, suspicion and alarm. However, this is gradually changing to taking action to improve achievement as well as to research initiatives. For example, studies of impact of intervention and secondly, studies of factors affecting achievement, including teacher-related factors.

A Solomon Island project is targeting low-achieving schools, mounting a major remedial effort and then evaluating its impact.

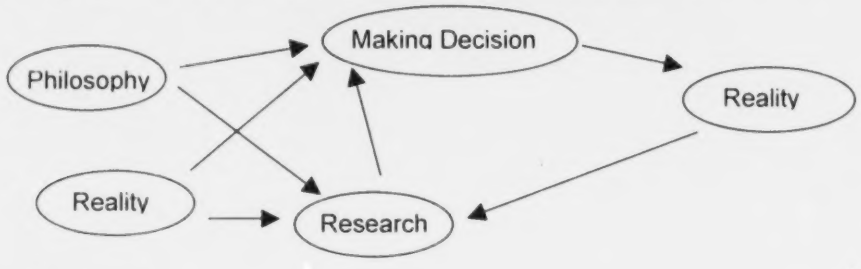
Useful strategies include:

- Ministry of Education – initiated research, such as the PILL testing and its following in 11 Pacific Countries.
- University researchers and lecturers deciding on projects after consulting Ministries of Education.
- Sharing of results by universities with decision-makings, teachers and other educational personnels.
- Involvement of teachers and other educators in (Action) Research so they become

interested stakeholders.

Viet Nam

1. The relationship between educational research and decision making



2. The system of research

The research sector in the Ministry of Education and Training in Viet Nam has the function of providing the Minister with a scientific basis for all policies and decisions. Research can be divided into various systems and levels:

Macro level or strategical: (long term research)	Educational reform (1950, 1956, 1980)
Micro level or tactical: (medium and short term research)	concrete phenomena in schools, in the teaching-learning process

- Basic/fundamental research for example, psychology, pedagogy, personnel
- Research on the teaching-learning process
  - Pilot research
  - Experimental/implementation research
  - Mass applied research
- Research for present innovation
- Research for future policy

3. The collaboration of the research sector and other sectors in MOET

- Researchers from educational institutes
- Professors of Universities/Colleges
- Collaborators from the management sector and the production sector
- Collaborators from experimental schools and localities

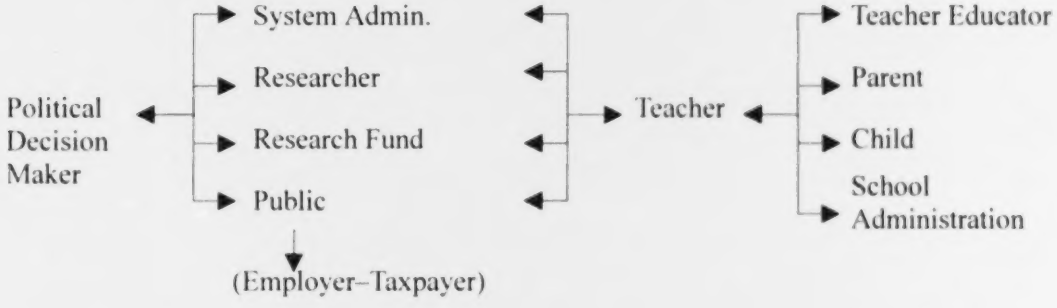
At the top level research decisions are decided by the National Educational Committee/Board. According to the kind of research, it will be more or less directly related to decision making.

Part B: Group Discussions Summary: Relationship between Researchers and Teachers

The meeting began discussion of the topic of this chapter with a plenary panel session followed by a plenary discussion, small group discussion and plenary reporting session. The reports of the group discussions are set out below.

Group A

1) This group recognised the importance of stakeholders in education as a pre-requisite to discussing the teacher-researcher nexus. The following table identifies a number of stakeholders and the relationships between them.



2) The initial role of the teacher in research was noted in two ways, especially since the teacher is the bridge between the researcher and many stakeholders in education. The first is that the teacher needs to be part of the research which means being fully briefed on it and a participant in it, where appropriate. Secondly, the teacher should be a focus for the dissemination of research to which end researchers might use a digest of research or a research abstract style to provide information.

3) The teacher needs to be empowered to do research. This implies the need not only for the authority to undertake research but also the resources of time and money to carry it through. If teachers are to be capable researchers, pre-service and in-service teacher educators need necessarily to include research methodology and practice in their curriculum.

4) Policymakers and researchers will better appreciate each other if they discuss research with each other. The researchers need to argue for longitudinal study and fundamental research has to be balanced with the policymakers for research in the short term, reported on in terms readily understood and open to speedy application, i.e. consumer friendly.

5) Given the use of cycles in national economic and educational planning, researchers might concern themselves with pre-cycle research for planning, and in-cycle and post-cycle research into and evaluation of plan implementations.

6) Research funding bodies and controllers of such funds have a key role to play in allocating resources for research and, hence, the type of research pursued. Equity in the research funding procedure is of interest and concern to policymakers and researchers alike.

7) Attitudes to research are also an issue. Educational research often does not have high status partly because of its methodologies, partly because educational researchers may distance themselves from the educational community.

8) Political and administrative decentralisation has changed the base of research activity from national and central bodies to provincial and school levels thus creating a new focus for researchers.

9) For teachers to appreciate and utilise research, resource centres are required. These centres should provide data bases accessible to teachers, research facilities and on-line communication, teachers are to be assisted by research.

10) Finally, this panel suggested that universities and similar institutions work harder at disseminating their research so that it reaches policy-makers who, likewise, need encouragement to have research data-bases carefully monitored to assist them in their policy or decision-making.

Group B

Relationship(s) between researchers and teachers

Various approaches to improving the relationship(s) between researchers and teachers were canvassed.

1) Student teachers and teachers already in classrooms could become more research conscious/literate and more motivated to use research if pre-service and in-service courses included research as a component. This component could be linked to the teaching practice component.

2) Inspire teachers to become involved in conducting research – action research. Involvement would give a sense of ownership of findings, which would increase the likelihood of their utilisation.

3) If researchers were also located in regions, not just in capital cities, a closer relationship could be developed.

4) Seminars by researchers for teachers could be offered.

5) In-service programs could be reviewed and designed based on the (latest) research findings; i.e. course material is research-based, and is systematically and regularly reviewed and revised.

6) Regional superintendents and school principals are given feedback by researchers who collate the results of national examinations by main subjects for regions (or schools) so that weaknesses can be identified and addressed.

7) Examination data-sets are made available to teacher training institutions for further analyses by teacher trainers.

Relationships between researchers and policy/decision-makers

The reasons why decision-makers often do not take up research findings were explored. They included:

1) relevant research findings are not available;

2) politicians prefer to go with their own experiences or intuitions, or voter preferences;

3) decision-makers choose results which produce short-term tangibles. Longer-term options indicated in research are likely to be set aside.

4) decision-makers may have to select lower cost alternatives to the ideal found by research.

It was suggested that take-up would improve where decision-makers were able to participate in the choice of topic, and the research objectives and design. Then the outcomes and timeliness would be known by key stakeholders from the outset.

Group C

The relationship between researchers and teachers

1) Who should carry out research on teachers and teacher education?

   - Ministry of Education and other public agencies,
   - Teacher training colleges,
   - Universities,
   - Individual researchers.

Major educational research institutions/divisions, regardless of whether they are public agencies or independent bodies/institutions, should play major roles in conducting research on teacher and teacher education.

2) Teachers should be encouraged to conduct their own research at their work places, that is to conduct action research that can be used to strengthen instructional planning and their teaching effectiveness. Special research grants need to be awarded to those teachers who are planning to conduct their own research.

3) Teachers could have active participation in all research activities conducted by the research institutions, and special recognition should be awarded to those who do.

4) In order to train teachers to be researchers, both pre-service and in-service training programmes for teachers need to cover research methodologies as one of their main topics.

Valuing educational research

Among the major approaches that could be used to make the policy makers see the importance of research and findings in relation to their work are the following:

1) Major research institutions and other agencies that are responsible for conducting research have to identify research priorities in education and get decision makers' attention about the importance of each identified area.

2) Planners at all levels should play a more effective role to influence decision makers to include educational research activities as part of the Ministry of Education's annual principal work targets.

3) Effective approaches should be utilised in order to make decision-makers become more aware about the importance of research-based planning documents in the process of making decisions. Informed-decision making is a critical factor in order to achieve a high level of efficiency and effectiveness in their departments/institutions.

4) Research institutes/divisions should systematically identify policy makers' needs and be able to translate those needs into a research agenda - with the knowledge of and consultation with decision makers themselves.

5) Research must be presented to the decision-makers in a clear and straight forward way in simple language, or in the decision makers' language.

Improved communication, and better focused and effective research findings

The relationship between the educational researchers and decision-makers could be improved through various professional linkages. They could include:

1) To have frequent meetings and discussions between research institutions/divisions and educational planners and decision-makers. One of the main focuses of the meeting should be the existing and future research agendas.

2) To have effective means of dissemination of research findings such as through seminars, publications, and other professional forums. During those forums, it is important to ensure that all planners and policy makers from relevant educational agencies are invited to take part, including in any panel discussions.

3) To have decision-makers take their time to review the final report of the completed research, particularly those that are related to their agencies/departments.

4) To have the research process included in policy making, and vice-versa.

Conclusion

In the panel discussions, some common threads can be found. There is seen to be a need for more discussions between researchers, and teachers, policy-makers and the educational community concerning the purposes and methodologies of research. There is also an apparent need for research expectations to be reasonable, research readiness flexible and research and its findings digestible. Partnerships is probably the best word to describe how research ought to proceed if its potential is to be realised.

Chapter 5: Conclusion: The Next Steps?

This regional meeting of Directors of Educational Research and Development Institutes in the Asia-Pacific Region has enabled participants to share information about the research being undertaken in our respective countries on "Teachers, Teacher Education and Development". In so doing we have learnt much about the current status of educational research in the Asia-Pacific region.

Despite the differences between countries regarding, "teachers and teacher education", all countries are, to varying degrees, interested in having more high quality, reliable research studies on the following types of issues:

1) What are the main variables that influence the recruitment of the most capable and appropriate individuals into the occupation of teaching? If relatively low teacher salaries in many of our countries has had a detrimental impact on recruitment levels, what is the evidence regarding the actual salary levels that will need to be paid to attract the most capable people into occupation?

2) What are the characteristics of those pre- and in-service teacher education programmes that are likely to be most effective in developing the knowledge, skills and sensitivities of effective teachers?

3) What are the characteristics of 'most effective' and 'good' teachers, and how can knowledge about this matter be best operationalised in the design and implementation of teacher education programmes?

It is clear from our deliberations over the past week or so that although some good educational research is already available in our various countries which addresses at least some of these types of issues, such research is not having a sufficient impact on education policy makers and education decision makers. This is part of a broader issue discussed at this meeting, which refers to what can be done to increase the impact of educational research on the policy making and decision making process.

Put briefly, evidence indicates that from the point of view of decision-makers in the Asia-Pacific region, it is essential that researchers such as ourselves do more to ensure that: their research is conducted on topics that are of keen interest to decision-makers; researchers clearly specify the policy implications of their findings; the research is of high quality, with a rigorous methodology; the claims made in the research are realistic, in terms of data collected and methodology adopted; and the research findings are expressed precisely, concisely and in concrete form.

This is just as true for research on teachers and teacher education as it is for research on other education topics.

We have noted at this meeting that it is useful to continue to have regional meetings of educational research and development institutions in the Asia-Pacific region. However, while the last three meetings of Directors of Educational Research and Development Institutions have been helpful in improving the networking between the institutions involved, and with exploring topics and issues of common interest, perhaps our future meetings should also be of researchers in these institutions who are personally involved in undertaking research on the topics that are of common interest.

In addition, we have noted at this meeting that, rather than examining a different topic at each of our future meetings, it would probably be most helpful if we were to have several meetings on aspects of the same topic. In this way we can probably achieve greater depth and follow up to our deliberations, between the meetings held.

We have decided at this meeting that we should (to varying degrees) do further follow up, collaborative research and information sharing between our institutions on one or more of following the topics;

1) The effects of changes in economic conditions on teachers and teacher education;
2) Norms used to calculate supply and demand;
3) What is an effective teacher? For example, what competencies are deemed necessary for teaching; what qualifications are required?
4) Policies to attract teachers to work in remote locations;
5) Different systems for teaching practice during pre-service training;
6) Approaches to distance education for the continuing education of teachers;
7) Teachers' attitudes, interest in self-learning, enjoyment of their work;
8) Preparation for multi-grade teaching;
9) The evaluation of pre-service and in-service teacher education programmes;
10) Policy and practice for the induction phase for beginning teachers; and
11) Teacher appraisal systems.

These topics are not ranked. However, when collating the preferences of these groups, four topics emerged as the top priorities: items 3), 4), 5) and 9).

ACEID certainly supports this proposal and will seek to provide funds from UNESCO's 1998-1999 budget to help bring this proposal to fruition.

We should not conclude without thanking NIER (and in particular Mr. Ryo Watanabe and his colleagues) for organising this timely and helpful meeting of Directors of Educational Research and Development Institutes in the Asia-Pacific region. This meeting would not have been possible without the substantial financial support of NIER, for which UNESCO and ACEID are most grateful.

Everyone attending this meeting has no doubt had a professionally enriching and personally enjoyable time. In addition to the professional development achieved we have all come to better know and understand Japan and its people.

Ultimately, the test of what was achieved at NIER, over the nine days, will be judged by the follow-up which each of undertakes on return to country. How will each of us be different when we return to our offices in a few days time? What will we do differently, as a result of this meeting; and what will we do individually to share our enriched knowledge and understandings with our colleagues and friends "back home".

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Appendix 1: Country Papers

China

I. The situation of teachers and teacher education

I.1 The improvement of teacher contingent

1.1 Increasing the number of teachers

The hope for revitalization of the Chinese nation lies in education, and the hope for revitalizing education lies in the teachers. The quality and the necessary quantity of teachers are the basic conditions for high-quality education, and the improvement of the quality of different levels of education depends mainly on the teachers' moral and professional competence. The performance of excellent teachers can make up to a certain degree for the shortage of school facilities. For this reason, the construction of the teacher contingent must be treated as an important and strategic measure for realizing educational modernization and upgrading education quality.

The teacher contingent of China has been constantly strengthened in the recent years. By 1996, China had 11.21 million full-time teachers in regular schools at all levels (table 1) and 469,900 teachers of adult education (table 2).

Table 1. Number of full time teachers in regular schools at all levels (in ten thousand)

	1993	1994	1995	1996
General higher education institutions	38.78	39.64	40.07	40.25
Secondary schools	381.97	391.18	403.76	415.66
Specialized secondary schools	23.93	24.70	25.68	26.74
Skilled workers schools	15.13	15.29	15.45	11.54
General secondary schools	316.68	323.27	333.42	346.48
Senior secondary schools	55.9	54.68	55.05	57.21
Junior secondary schools	260.78	268.89	278.37	289.27
Vocational secondary schools	26.17	27.66	29.21	30.76
Schools for misbehaving children	0.16	0.16	0.16	0.14
Primary schools	555.16	561.13	566.41	573.58
Special education schools	2.04	2.27	2.52	2.70
Pre-school education	83.60	86.18	87.51	88.86
Total	1061.55	1080.40	1100.27	1121.05

1.2 Qualifications of teachers for various kinds of schools at all levels

At its fourth meeting, in October 1993, the Standing Committee of the National People's Congress adopted the Teacher Law of the People's Republic of China. It stipulates that teachers are the

professional personnel who shoulder the responsibility of education and instruction, undertake the tasks of imparting knowledge and educating people and improve the quality of the people. It also clearly stipulates that "our country adopts that qualification system for teachers." Based on this law and " the Law of Education of the People's Republic of China (adopted on March 18 and came into force on September 1, 1995)", the State Council formulated and enacted the "Regulation on Teacher's Qualification " and "Provisional Measures on Teachers' Qualifications Confirmation" by the end of 1995.

Table 2. Number of full-time teachers in adult schools at all levels (in ten thousand)

	1993	1994	1995	1996
Higher education institutions for adults	8.95	9.49	9.82	9.86
Specialized secondary schools for adults	10.39	10.96	11.27	12.13
Technical training schools for adults	11.07	15.10	19.67	16.94
Secondary schools for adults	2.04	2.05	2.33	2.10
Primary schools for adults	4.05	5.14	5.75	5.95
Total	36.50	42.74	48.84	46.99

The qualification system for teachers is the legal system in China which gives permission for the teachers to practice. It stipulates the titles, types, the scope of application of teachers' qualifications, the requirements for different kinds of teachers, the examinations for teachers' qualification, the confirmation of the teachers' qualification, and their legal liabilities. The requirements of the teachers' status is a vital part of the teachers qualification system. To acquire a teachers' certificate, the following requirements must be met:

----Citizenship. To be qualified as a Chinese teacher, he or she must first be a Chinese citizen. On the other hand, any Chinese citizen, regardless of ethnic origin, sex, or occupation, can acquire a teacher's status so long as he or she meets all the teacher's qualifications.

----Ethical requirements. To apply for a teacher's certificate, one has to be sound ideologically and politically. This is a basic requirement for our teachers, determined by the socialist nature of Chinese education.

----Academic requirements. The academic requirements for different levels of teachers' qualifications are:

(1) Graduates from normal schools for pre-school education or above for teachers in nurseries and kindergartens;

(2) Graduates from secondary normal schools or above for teachers in primary schools;

(3) Graduates from two-year normal college or other colleges or above for teachers of junior middle schools or teachers who teach general academic and specialized courses in junior vocational middle schools;

(4) Undergraduates from normal or other universities and 4-year colleges or above for teachers of senior middle school, or teachers who teach general academic and specialized courses in

senior specialized secondary schools, skilled workers schools, and vocational schools. Academic requirements for coaches who supervise over the field work of students from senior skilled workers schools, and vocational schools shall be specified by related state government authorities in charge of education.

(5) Postgraduates or undergraduates from universities for teachers of higher learning institutions;

(6) Graduates from schools of higher learning or secondary schools or above for teachers of adult education in accordance with different levels and types of adult education involved.

----Educational and teaching abilities. In order to select the right educational or teaching content and method, design the teaching program scientifically, and conduct educational and teaching activities effectively, a teacher must have a good command of pedagogical and psychological laws, a reasonably good articulation and ability to handle the students, an ability to conduct scientific research so as to improve the teaching content and method and raise the teaching standard, and a good physique needed for conducting teaching activities.

1.3 Teacher's employment and promotion

In accordance with the regulations of the central government, schools are authorized to manage their teachers independently. The schools shall, within the state formulated establishment ceilings, independently decide upon the employment of teaching and supporting staff, the terms of employment and methods of selection although the method generally adopted is choosing the best possible following comprehensive examinations.

The state sets annual post quotas for schools of various kinds and at various levels. Those teachers that fit the post qualifications and gain the approval of the selection and examination organs are engaged as teachers.

A system of teachers' professional titles is implemented in China. In higher education institutions titles of teachers are divide into professor, associate professor, assistant professor, lecturer and assistant lecturer. Professional titles of teachers in specialized secondary schools and vocational secondary schools are composed of senior lecturer, lecturer, assistant lecturer and teachers. Professional titles for cultural and technical theory in skilled workers schools are senior lecturer, lecturer, assistant lecturer and teacher. Titles of teachers in general secondary schools are senior secondary school teachers, first-rank secondary school teacher, second-rank and third-rank secondary school teachers. Titles of teachers in primary schools and kindergartens are senior primary school teachers, second-rank and third-rank primary teachers. Table 3 shows the number of teachers categorized by professional titles in 1996.

Table 3. Number of teachers categorized by professional titles 1996

Types of schools	Professional Titles	Teachers
General higher education institutions	professor	33276
	assistant professor	110640
	lecturer	161863
	assistant lecturer	75423

Specialized secondary schools	senior lecturer	40193
	lecturer	110267
	assistant lecturer	102129
	teachers	14822
General secondary schools	senior secondary school teachers	159877
	first-rank secondary school teacher	834451
	second-rank secondary school teacher	1496156
	third-rank secondary school teacher	439690
Vocational secondary school	senior secondary schoolteacher	19408
	first-rank secondary school teacher	80940
	second-rank secondary school teacher	124902
	third-rank secondary school teacher	33630
Primary school	senior secondary school teacher	4315
	senior primary school teacher	1128404
	first-rank primary school teacher	2637278
	second-rank primary school teacher	1077581
	third-rank primary school teacher	160860

1.4 Career Guarantees during Term of Employment

In accordance with the Teacher Law of the People's Republic of China, the main material benefits include: (1) Teachers' average salary shall not be lower or shall be higher than that of the State public servants and shall be raised gradually. (2) Teachers of primary and middle-schools and vocational schools enjoy subsidies in accordance with the length of their teaching and other subsidies. (3) Local people's governments at all levels and the departments concerned under the State Council shall give priority and preferential treatment to teachers in the construction, renting and sales of the houses for them in urban areas. (4) teachers enjoy equal medical care treatment as the State public servants of the localities. They shall be given regular health check-ups and enjoy recuperation holidays organized in line with actual local conditions. (5) After retiring or resigning from posts, teachers enjoy the retirement or resignation treatment as stipulated by the State. Local people's governments above the county level can appropriately raise the pensions for the retired primary and middle school teachers who have long been engaged in education and teaching. (6) Measures shall be adopted to improve the treatment of the teachers who receive state subsidies and are paid by the collectives so that they can enjoy equal pay for equal work as the teachers who are paid by the State.

The Constitution of the People's Republic of China provides that female teachers enjoy equal rights and treatment as their male counterparts. The female teachers as percentage of total teachers population gradually increased in the recent years.

Table 4. Female Teachers as percentage of total teachers population (%)

Types of schools	1993	1994	1995	1996
General higher education institutions	30.9	32.1	33.0	34.17
General secondary schools	34.0	34.7	35.7	36.95
Primary schools	45.2	45.8	46.6	47.40

I.2 The situation of teacher education and its problems and trends

2.1 The current system of teacher education in China

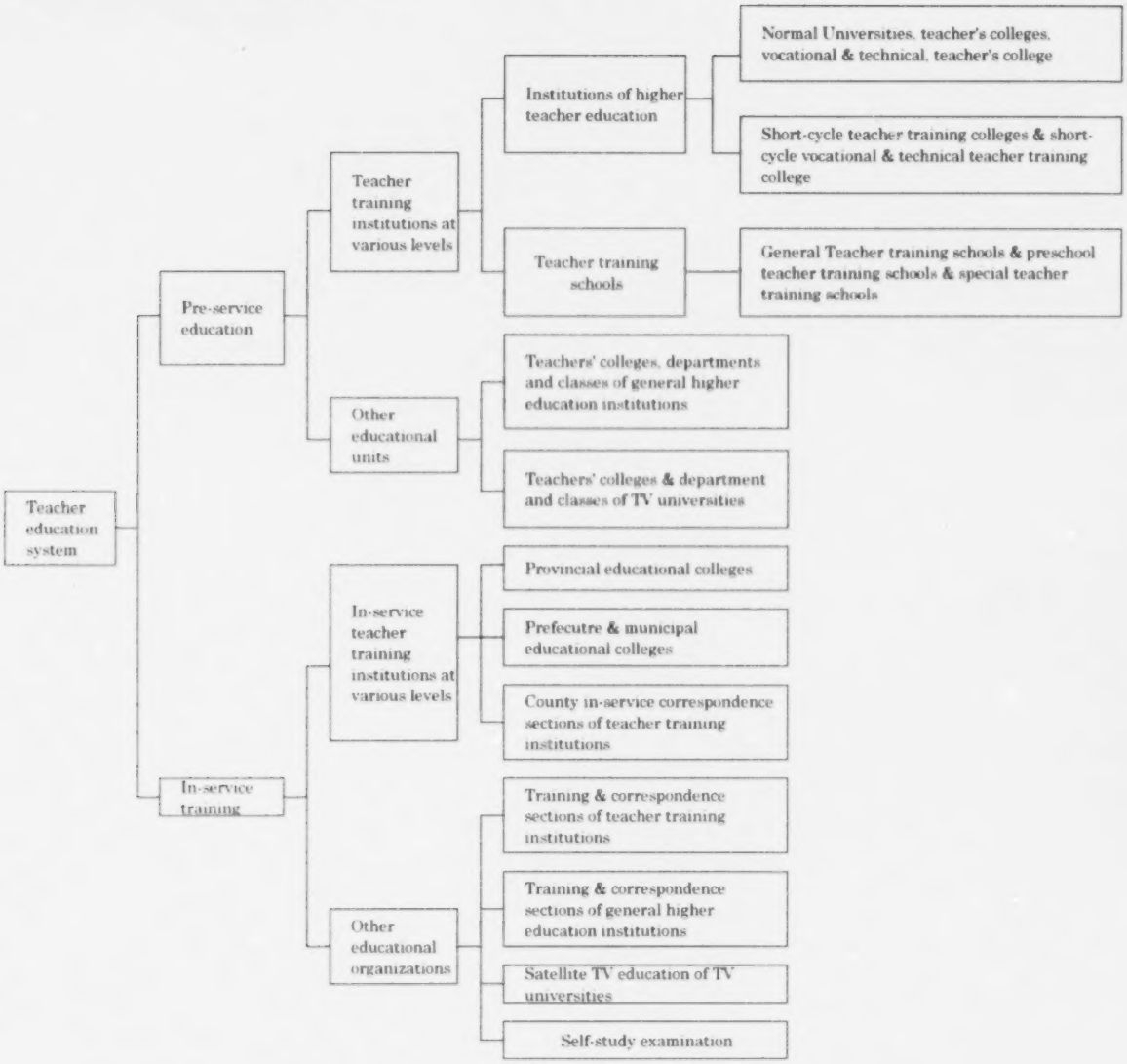
The first teacher training institute in China was established in 1897. Fifty years later, there were still only 12 institutes of teacher education . However, by 1995, the state has set up 1133 teacher training institutions at various levels with 1.43 million students and 2273 in-service teacher training schools and colleges with 700 thousand trainees. Due to the huge number of secondary and primary school teachers in China, teachers' training is a shared responsibility of various levels of education administrative organs, regular normal schools, teachers' training institutions of various kinds and at various levels and other training agencies as well as the schools where the teachers work. The education administrative organs are to formulate polices, make financial appropriations, work out training programs and methods for management and examination and to sum up and spread good practices in a timely manner. The training institutions are to join hand with organs responsible for educational research in organizing training activities systematically, providing professional guidance and management for training activities and conducting training research. The schools in which teachers work are the prime places for teacher's training. They should provide time for training and necessary material conditions for a systematic, permanent and effective teachers' training.

The system of teacher has been shaped, with multi-channels, and multilevels, and with a variety of forms, and with various teacher training institutions at different levels as the main part (see table 5).

2.2 Main content of primary and secondary school teachers' pre-service training

Before primary school teachers start working, they usually acquire a specialized education in secondary teacher training schools. The general teacher training schools enroll graduates from junior secondary schools, offering either a 3- year or 4-year program. The courses offered are made up of 4 parts: compulsory courses, optional courses, teaching practice and extracurricular activities. The compulsory courses offered are as follows: ideological and political education, Chinese (including methodology of Chinese teaching in primary school), mathematics (including methodology of mathematics teaching in primary school), physics, chemistry, biology, history, geography, psychology, pedagogy for primary school, classroom language, basic audio-visual education, physical education, music, fine arts, laboring skills, basic application of computers, etc.. The optional courses include subjects offered in accordance with the educational needs of the school's teaching area to broaden and deepen the students' knowledge and develop their interests and aptitude, and vocational and technical subjects for the local economic development. Teaching practice includes visits to primary schools, educational survey, teaching probation and student teaching, etc. And the extracurricular activities consist of science and technology, arts and sports through lectures, groups of interests and social survey, etc.

Table 5. Teacher education system


Teacher education system
Pre-service education
In-service training
Teacher training institutions at various levels
Other educational units
In-service teacher training institutions at various levels
Other educational organizations
Institutions of higher teacher education
Teacher training schools
Normal Universities, teacher's colleges, vocational & technical, teacher's college
Short-cycle teacher training colleges & short-cycle vocational & technical teacher training college
General Teacher training schools & preschool teacher training schools & special teacher training schools
Teachers' colleges, departments and classes of general higher education institutions
Teachers' colleges & department and classes of TV universities
Provincial educational colleges
Prefecutre & municipal educational colleges
County in-service correspondence sections of teacher training institutions
Training & correspondence sections of teacher training institutions
Training & correspondence sections of general higher education institutions
Satellite TV education of TV universities
Self-study examination

Prior to employment, teachers of secondary schools must receive an education in politics, physical culture, basic theories of specialized courses, basic knowledge and skills, pedagogy, psychology, and basic knowledge and skills about methodologies of specific courses in normal universities, teacher's colleges or other colleges and of higher learning institutions.

2.3 In-service training for primary and secondary school teachers

In-service teacher training for primary and secondary schools is one of the important parts of teacher education in China. Its chief task is to improve the ideological and professional competence of primary and secondary school teachers.

In the past ten years, the primary tasks of in-service training of primary and secondary school teachers are academic education leading to a diploma or a certificate, continuing education, and

qualification training of educational administrators. Now the systems of primary and secondary school teacher training and qualification training of educational administrators have been gradually set up in the whole country.

The main forms of in-service training for primary and secondary school teachers are as follows:

----Systematically send teachers to in-service training institutions at different levels with the purpose of having them qualify for certain academic status. In 1995, there were 2273 in-service training institutions in the whole country, among which 35 were provincial educational colleges, mainly for senior secondary school teacher training, 207 prefectural or municipal educational colleges, mainly for junior secondary school teacher training, and 2031 county in-service training schools, mainly for primary school teacher training.

----Through a training model which combines correspondence and satellite TV education with national examination system for self-taught students.

----Offer the chance for junior middle school teachers to take the courses in 2-year programs of normal universities through self-study and acquire qualifications through a series of examinations.

----Encourage teachers to study while working. Encourage them to improve their competence in teaching in close connection with their teaching practice and in all possible forms: to be trained by the school itself, to learn through research work, to make the veteran teachers help the young, or to make them teach themselves.

----Have the government educational authorities sponsor various kinds of training programs and organize teachers together for intense training.

----Have schools at various levels authorized to undertake teachers' training to offer training, in accordance with specific plans, to teachers of primary and secondary schools who are new on the job, or need training for their specific posts, or are the backbone of the school, or need more education to meet the qualifications of a higher academic title.

2.4 Problems and trends of teachers and teacher education

China, in its transition from a planned economy to a socialist market economy and due to the unbalanced development of its economic, cultural and educational sectors, is confronted with many obstacles and problems and difficulties to be solved. The main problems of teachers and teacher education are:

----The overall quality of teachers should be improved. Due to historical reasons, the cultural competence, moral and ethical standards and professional competence of teachers are relatively low and need to be strengthened.

----The structure of teaching staff is not adequate. The ratio of senior teachers in the title system of secondary and primary school teachers is relatively low. In 1995, the rate of senior teachers for junior secondary schools was only 2% of the total junior secondary school teachers. The teachers for subjects of Chinese and mathematics are in surplus while the teachers for subjects of music, physical education, fine arts, foreign languages and laboring skills are in shortage.

----The regional distribution of teaching staff is uneven. Teachers are oversupplied in some urban

areas while they are seriously short in vast rural areas, especially in remote and poor areas. Due to the difference between the city and countryside, the teacher's vacancies in poor rural areas are hard to fill which influences unfavorably the process of universalisation of nine-year compulsory education.

----Teachers' status needs to be further improved. The average salary of teachers was still lower than those of state civil servants in 1996. In some provinces, the teacher's salary was behind in payment which made a severe impact on the teacher's life and harmed the government's prestige. Generally speaking, many difficulties exist in improving the teacher's housing and health conditions.

----Reform of management system of teacher education should be deepened. The orientation of management system of teacher education is to set up a system adapted to current primary and secondary education. For basic education, the local authorities are responsible for secondary education and below under the guidance of policies of the central government with the system that schools are run by different levels and managed by categories. Governments at the provincial level should strengthen the authority for overall planning, decision-making and management of teacher education in the areas under their jurisdiction. This includes mapping out plans for the development of teacher education, optimizing the distribution of teacher training schools and raising the efficiency of school management.

----Modes of training qualified teachers, curriculum and teaching content need to be reformed. Teacher training institutions must rationally readjust their faculties and specialties, enlarge the scope of specialties, optimize the structure of curricula, restructure course content and teaching methods, gradually introduce a double-majors system, strive to raise the quality and capability of students, and train them to better adapt to the needs of society.

One trend in Chinese teacher education is that the stress on in-service teacher's training is shifting from qualification remedial program to teacher's professional development. The emphasis in the training of primary and junior secondary school teacher was laid on improving their qualifications in 1980s and 1990s. Fifteen years of effort has resulted in raising the proportion of teachers with required qualifications. The rate of primary school teachers with required qualifications increased from 36% in 1978 to 90.91% in 1996 and that of junior secondary school teachers from 10% to 75.5% in the same period. It is estimated that in 2000, the proportion of teachers in primary and junior secondary schools whose qualifications meet the criteria will reach 95% and 80% above respectively. Given the situation, the stress in the training of teachers has been switched to provide continuing education for them. The continuing education of primary school teachers is designed to improve their ethical standards, proficiency in pedagogical theories and capabilities in education and teaching. The continuing education that is being offered includes the training of new teachers on probation, job-specific training and training of core members of the teaching staff.

Another trend in Chinese teacher education is a tendency of regionalisation in teacher education development. The economic development is in great disparity in different regions of China as represented by the highly developed eastern regions and the underdeveloped western areas. There are big differences among the eastern, central and western regions of China in the sizes, levels, forms and quality of teacher education. As a result, teacher education development will become more regionalised and show more regional colors. For example, some economically developed regions on the east coast began to initiate 2-year or 3-year collegiate-level pilot programs to train teachers for primary schools and some normal universities initiate postgraduate programs to train

" Master of Education" for secondary schools.

II. Present priorities for research and development work of teachers and teacher education in China

In September 1996, the State Education Commission convened the National Conference on Teacher Education in Beijing. The main task of the Conference was to further call on the governments and administrative departments of education at different levels to think highly of teacher education and strengthen the building of the teaching ranks for primary and secondary schools, implement the strategy of development of teacher education as a priority in whole educational course, research the issues and counter measures for teachers and teacher education, make efforts to realize the "two primaries" (primarily universalizing nine-year compulsory education and primarily eradicating illiteracy by the end of the century), formulate the objectives and strategies for building up the teaching ranks for primary and secondary schools, make more clearly the tasks and trends of reform and development of teacher education oriented to the 21st century. The Conference set the following tasks as the priorities for development of teachers and teacher education:

1. To perfect current teacher education structure.

Proceeding from the national characteristics, China must keep an independent system of teacher education in order to guarantee a steady basis for training a huge number of prospective and on-the-job teachers. The main body of the system of teacher education is various independent teacher training institutions at different levels, while, other educational units play a coordinating role for training teachers. As of 1996, there were more than 2 million students enrolled in teacher education, more than 90 per cent of them in teacher training institution at various levels. Only a few prospective teachers, including only 8 per cent of secondary teachers, are enrolled in comprehensive universities. With emphasis on science, research and credentials, trends in Chinese teacher education resemble those in teacher education in many parts of the world. However, the important role of teachers' universities and colleges compared to the relatively minimal role of comprehensive universities in China's teacher preparation is just one feature which distinguishes China from many other developing countries. In most part of the world, there seems a movement of formal programs of teacher education into comprehensive universities, and the transformation of teacher training into universities or colleges of education. Some educators consider China's particular system of teacher education is firmly institutionalized in colleges and schools of teacher preparation. Is it necessary to adjust current teacher training system? There exists a heated argument in educational academic circle. The national policy is that it should basically stabilize independent system of teacher education and basically stabilize current "three-level"(teacher training schools, short-cycle teacher train colleges and normal universities or teacher's colleges) structure of teacher training in the next ten years.

2. To strengthen implementation of the teachers' qualification system.

The implementation plan of present teachers' qualification system consists of three steps: First, accomplish the transition of the over ten million in-service teachers to proper qualifications; then, conform the teachers' qualifications of those who apply to be teachers and meet the requirements outside schools; and last, conform teachers' status to applicants through teachers' qualifying examinations in accordance with the "Procedure of Teachers' Qualifying Examinations" formulated by the State Education Commission.

3.To continue to improve teacher's status

It includes the following four aspects:

----Raising teachers' salaries: during the period 1980-85, the wage increase in the education sector tended to exceed average wage increases for the economy as a whole or for government agencies as a whole. During the period 1986-91 wages in education grew less quickly then wages in either the whole economy or government sector. Following the salary reform in 1993, the overall salary level of teachers has registered a substantial gain. In the next few years, the Government is striving to execute the Teachers Law which stipulates that the average salary of teachers is no less than or higher than that of the public servants of the state.

----Improving teachers' housing conditions: in recent years, the various local governments invested a huge amount of money in housing projects for teachers of secondary and primary schools and regular institutions of higher learning. As a result of these substantial input, the housing difficulties for teachers have been alleviated to a certain extent. At present, the construction of teachers' housing is listed in the overall plan of city construction and the plan of high-standard housing project. In the following years the average housing area per person in a teacher's family is up to or more than that of local settler. In the course of implementation of reform of housing system, favorable policies will be adopted for teachers in construction, rental and sale of houses.

----Improving the medical care for teachers: The Teachers Law of the People's Republic of China stipulates that teachers will enjoy the same medical treatment as the public servants and their medical fee will be reimbursed at the same standard; the state will adopt the favorable policy in reforming the medical and insurance system for teachers.

----Settling the problems of community-paid (minban) teachers: before the agricultural reforms, "minban" teachers earned their living through the "labour" of teaching and were entitled to a share of output from the commune to which they belonged. Today, "minban" teachers receive no official salary and depend on community contributions and proceeds from land which they are entitled to farm. The community-paid teachers are concentrated in the schools for compulsory education in rural areas and 90% of the community-paid teachers work in primary schools. For a long period of time the community-paid teachers devoted themselves in harsh conditions in rural areas and made a great contribution to the development of educational causes in China. In accordance with the standards of the Law of the People's Republic of China on Compulsory Education, the competence and treatment of community-paid teachers will be enhanced; those community-paid teachers who are trained and still unqualified will be replaced. Gradually the community-paid teachers will be converted into government-paid (gongban) teachers. Starting from 1995, the State set an annual quota of 150,000 posts for the qualified community-paid teachers. The State Education Commission made a five-year plan for settling problems of community-paid teachers together with the departments of the State Council concerned and experts to settle the issues of community-paid teachers by the year 2000.

4. To promote the reform of teaching content, curriculum and methodology of teacher education.

In the wake of deepening for structural adjustment, it has been made clear that the reform of teacher education is the core of the many reforms going on in institutions of teacher training. So far as the reform of teacher education is concerned, the focus and difficulty lies with teaching content,

curriculum and teaching methods. The State Education Commission has started the implementation of a program for the reform of teaching content and curriculum to meet the needs of the 21st century.

----The reform of teaching content. The teaching community has to face the challenges of science and technology. There has been an explosion not only in scientific and technological knowledge but also in the means and techniques of acquiring knowledge. The future teachers should master the most basic core knowledge and should come just to seek information about the "source of knowledge". On the basis of imparting knowledge, the key point of teaching must be laid on the cultivation of students' ability to learn new knowledge. The syllabus of all subjects taught at the teacher training institutions will be renewed in the light of new developments in culture, science and technology. All subjects have become more adaptable to the needs of the students in basic theory, basic knowledge and basic skill training, and greater attention has been given to the training of the student's capacity to adapt to the society. The teaching of foreign language and computer science, as well as educational theory and the training of teacher's professional skills should be strengthened.

----The reform of curriculum. Teacher education, by its very nature, is interdisciplinary. The scope of the teacher education curriculum needs to be enlarged. The foundation courses of teacher education programs are interdisciplinary which include philosophy, psychology, sociology, economics, anthropology, life science, history and culture and other professional courses. The various components of the curriculum framework are so interlined as to lead towards the realization of the disciplinary goal of education. The curriculum should sufficiently reflect the national values and goals and the latest developments in the field of teacher education. The reform of curriculum also emphasizes an appropriate blend of theory and practical components and makes efforts to ensure that the pre-service and in-service training of teachers are inseparable.

----The reform of the teaching methods. Great attention has been paid not only to the introduction of the heuristic method of teaching, the enhancement of students' ability of observation, of pondering, analyzing and solving problems but also to the mobilization of the students' initiative and enthusiasm in their studies. Various pilot schemes will start, and more attention will be given to the use of up-to-date teaching media such as computer-aided instruction.

Indonesia

I. CONDITION OF TEACHERS AND TEACHER EDUCATION AND TRAINING

A. Introduction

Since the end of 1960's the new order government has embarked on the implementation of well planned national development programs conducted for all aspects, including economy, politics, and education. The programs are directed to achieve the national goal which is a just and prosperous nation based on the state philosophy Pancasila and the 1945 Constitution. The development programs since then have been carried out systematically and vigorously through the five year development plans.

Since then the economic condition of Indonesia has improved significantly from time to time. The economy has grown over 7% on average annually, income per capita is increasing rapidly, and the level of poverty has been reduced sharply. In the education sector, a lot of improvement has been achieved specially in terms of educational equality. Since 1968 (before the first five year development plan) students' enrolment has increased sharply. For instance, enrolment at primary, junior secondary and senior secondary school from 1968 to the present time has increased from 12.2 million students to 29.5 students, from 1.1 million students to 8.4 students, and from 0.48 students to 4.7 students respectively. At the same period the net enrolment ratio has increased from 58.4% to 94.8%, from 17% to 46.5%, and from 8.5% to 27.5% respectively at the primary, junior secondary and senior secondary levels.

The success of development endeavour in the education sector can be seen that at present nearly all children of primary school age have been enrolled in school. And since 1994 the government has started a program of universalisation of 9 year basic education. It is aimed that within 10 years all children of 7 - 15 years old should be enrolled at school, or in other words everybody should have at least obtained 9 years basic education.

On the other hand, there is still a big problem regarding the improvement of educational quality in general. A lot of efforts have been pursued in this matter through various activities. These include, for instance, the improvement of teachers' quality through teachers' training and improvement of teachers' welfare, provision of textbooks and other reading materials, development of new curriculums, etc.

Despite all these efforts the educational quality in general is still not yet satisfactory. This is shown by the fact that on average students' achievement as measured by the school exams is still low for all levels of education. This is true especially for certain subjects such as mathematics, science and English.

There are many factors which cause this problem, including among others are the low quality of teachers, inadequate textbooks and other reading material, ineffectiveness of the teaching-learning process, low quality of school and classroom management, improper utilisation of learning/teaching materials, etc.

Among the factors which affect educational quality, the most important one is teachers. Despite a lot of efforts having been pursued regarding teachers and teachers' education and training, the

condition of existing teachers' pre-service as well as in-service training is still not satisfactory and needs much improvement. The following section explains briefly the present condition of teachers and teachers' education and training together with its problems, issues, and trends.

B. School Teachers

1. Quantity

Under the MOEC there are 1.17 million teachers of primary school, 412 thousand teachers of junior secondary school, and 327 thousand teachers of senior secondary school who teach 25.9 million, 6.9 million, and 4.2 million students respectively (See Table 1). On average based on the teacher-student ratio, the number of teachers looks adequate. However, there is a problem regarding teachers' distribution among regions, between urban and rural areas, and among schools.

Thus, there are primary schools having an over supply of teachers, while at the same time there is a shortage of teachers in other schools. This problem is caused by the lack of co-ordination among the relevant parties in charge of teachers' management, and a lack of discipline on their part in teachers'deployment based on the actual need and regulation.

Similar problems occur at junior and senior secondary schools. Beside that, at secondary schools there is a lack of teachers for certain subjects such as mathematics, science, and English, while at the same time there is an over supply of teachers in other subjects, such as social studies. A lack of teachers in some schools or regions does not always mean that not enough teachers have not been recruited. Very often it means that there is not enough budget from the government to recruit the teachers needed by the schools. In such a situation there is a large number of teachers who are unemployed, while at the same time there is a great demand for teachers in schools.

Table 1: Number of Teachers, Schools, Students, and Teacher-Student Ratio under MOEC

School Level	Number of Teachers	Number of Schools	Number of Students	Teacher-Student Ratio
1. Primary School	1,172,688	149,954	25,948,574	1:27
2. Junior Secondary	412,065	19,968	6,945,433	1:17
3. Senior Secondary	327,637	11,714	4,225,823	1:12

Note: The data does not include equivalent Islamic Schools (Madrasah).
The total number of teachers in Indonesia including teachers in Islamic Schools in primary, junior secondary and senior secondary schools, is 1.3 million, 530 thousand, and 395 thousand respectively.

Source: Indonesia Education Statistics in Brief 1995/1996

2. Quality

There are various indicators of teachers quality, such as teachers' educational background, teachers' mastery of subject matters, teachers attitude, teachers' performance, etc. At present formally the regulation requires primary school teachers to have DII diploma, junior secondary school teachers to have DIII diploma, and senior secondary school teachers to have S1 diploma. These 3 kinds of teachers' education qualification need 2, 3, and 4 years to accomplish respectively. Compared to the education requirement of teachers before 1990, the present requirement has already been increased. Formerly primary school teachers were only recruited from the graduates of teacher school at the level of senior secondary school, junior secondary school were from the graduates of

the DII program, and senior secondary school were the graduates of the DIII program. Based on the requirement of educational level, there are still 1,049,468 primary school teachers (89%) which have not met the requirement, while there are still 235,929 teachers (57%) and 86,306 teachers (26%) for junior secondary school and senior secondary school which have not met the requirement. To make the teachers meet the minimum education requirement the government has launched an equivalent teachers' upgrading program for the existing teachers. The upgrading courses consist of DII, and DIII programs.

There is still a problem related to the relevancy between education background of the teachers and the subjects being taught, especially in private schools. Table 2 shows that some teachers teach not according to their educational background. This mismatch for teachers in secondary schools who teach Indonesian, English, Mathematics, Science, and Social Studies at present ranges from about 25% to 4 %. This will consequently affect their performance assuming that their mastery of subjects taught is not adequate.

Table 2: Mismatch of Subjects Taught By Teachers

Subject Taught	Junior Secondary	General Senior Secondary	Vocational Senior Secondary
1. Indonesian	12.1%	7.8%	9.7%
2. English	6.5%	4.0%	5.3%
3. Mathematics	6.2%	4.4%	5.7%
4. Science	14.0%		
Physics		4.9%	
Biology		4.5%	
Chemistry		3.6%	
Social Studies	25.3%		

Source: Summary of School Statistics 1995/1996

Another indicator of teachers' quality is teachers' mastery of the subject matter to be taught. The educational background of the teachers can be an indicator of their mastery of the subjects to be taught. However in many occasions this may not be true because the school curriculum is changing from time to time to adjust to the needs of the society. Not all teachers can follow such development by retraining or upgrading themselves, and the quality of the institutions of teacher education in Indonesia vary quite a lot. Thus the mastery of subjects to be taught is a necessary requirement for them to be able to teach properly. The data from various research results and monitoring show that at present teachers' mastery of subjects is not satisfactory in many cases. This is true especially for teachers of certain difficult subjects like Mathematics and Science, especially in private schools. For example, the study conducted by Balitbang Dikbud (Research and Development Office) in 1980's on average the achievement of teachers in mathematics and science is 57% and 45% in primary school, 77% (Math), 55% (Physics) and 57% (Biology) in junior secondary school, 67% (Math), 58% (Physics), 51 (Biology) and 63% (Chemistry) in senior secondary school. A recent study (1996) in public general senior secondary schools shows similar results. The study required teachers to take the achievement tests constructed for their students based on the existing curriculum. Both teachers and students were therefore sitting the same tests. The result of the tests

even for the teachers was not satisfactory. It shows that teachers achieved 51.4%, 46.4%, and 72.7% for Physics, Chemistry, and Biology respectively. From the monitoring activities and general supervision it shows that many teachers in primary schools have difficulty in doing various simple arithmetics such as fractions and calculations. A similar problem occurs in vocational senior secondary schools. Many teachers have difficulty in mastering Mathematics and Science, and many lack professional skills to conduct practical work in the workshop. In general schools many teachers have difficulty in conducting experiments by using simple teaching materials in the laboratory.

Although many efforts have been pursued to improve teachers' performance through programs such as teachers' upgrading, improvement of teachers' salary and other incentives, etc. the performance of many teachers is still unsatisfactory. A study in Yogyakarta province in the mid 1980's shows that time on task of teachers in primary schools is low. The same may happen with teachers in secondary schools. General observations show that in general work morale of teachers is low which consequently affects their performance. Studies and general observations show that many of them cannot conduct effective teaching, and school and classroom management.

Since there is a shortage of teachers in certain subjects, especially in private schools, and teachers' salaries are not high, there are many teachers who have to teach in more than one school or do other side jobs which have nothing to do with teaching profession or education. This condition will of course affect the quality of their teaching. Many teachers do not have enough time to prepare themselves for teaching, and cannot update their knowledge in accordance with the ever changing condition related to their profession.

3. Welfare

Teachers in public schools receive a monthly salary according to a salary scale applied for any other public servants. The difference is that, in addition to their salary, teachers receive a functional allowance since teaching is regarded as a functional (professional) occupation like doctors, nurses, researchers, etc. However the amount of this allowance is still low. It is much lower than the functional allowance given to lecturers in higher education institutions. Other allowances include an allowance for over time teaching and an allowance from parents' contribution. However the actual amounts of both allowances in general are very small and depend on certain circumstances, such as the need for overtime teaching and economic condition of students' parents.

In general teachers' salary or income in Indonesia has not been able to meet the criteria as advocated by UNESCO which states that teacher salary should: (1) reflect the importance of teachers' occupation and function in the society according to teachers' responsibility, (2) be equal to the salary for the occupations which require similar qualifications, (3) enable teachers to have an adequate standard of living with their family, in order to have further training and cultural activities for improving their profession, and (4) enable them to fulfil the high qualification requirement and responsibility.

4. Management

Management of teachers in Indonesia is still far from satisfactory. There are several institutions or even ministries involved in teacher management, starting from identification of teachers' demand, planning of teachers' training, recruitment of teachers, deployment of teachers, development of teachers' careers, etc. In Indonesia primary school teachers are being managed by two technical ministries, the Ministry of Home Affairs (MOHA) which is in charge of administrative affairs and

the Ministry of Education and Culture (MOEC) which is in charge of technical /educational aspects. Thus teachers' recruitment, deployment, career development, welfare, and the like is conducted by MOHA, and pre-service training, in-service training, and the like is the responsibility of MOEC. Teachers in Islamic schools are under the responsibility of the Ministry of Religion (MOR).

A lack of co-ordination among the ministries and institutions concerned has created various problems. For instance at present there is not one agreed figure or set of statistics concerning teachers for management purposes. Data from various sources show different figures which causes problems in teacher management. The fact also shows that there is an over supply of teachers in some schools or regions on the one hand, and there is a lack of teachers in other schools and regions on the other. There is a lot of mismatch between teachers' background and the subjects actually taught. There is a big number of teachers being produced but which can not be employed. For example at present it is estimated that there are about 200,000 graduates of SPG (school of primary teacher) which have been abolished recently. There are also 20,000 graduates of the DII program for primary school teachers which have not been employed, while at the same time there is a lack of teachers reported in many schools or regions. In general there is not link and match between the supply and demand of teachers both at primary and secondary schools.

The fact also shows that there is a big difference between the number of teachers formally recorded and receiving a salary and allowance, and the number of teachers who actually teach at school. Many teachers have been placed to do another job in the government offices, but some of them go unreported. In many occasions teachers' career development such as promotion and rotation is conducted not based on a sound basis which is sometimes against a well planned program for educational improvement.

Another serious problem is that the supervision of teachers by a school principal and supervisor is mainly focused on administrative matters rather than on technical or teaching aspects. This will lead to the deterioration of teaching performance.

C. Pre-service Training

1. Programs and Institutions

Since 1990 the candidates of teachers for the primary to senior secondary levels have been trained in higher education. According to the formal regulation, primary school teachers have to have at least DII program diploma. Before 1990 they were required to be graduated only from school of primary teacher education called SPG, which has been abolished since then. As mentioned before teachers in junior secondary school are required to have at least the DIII program diploma, while teachers in senior secondary schools have to have the S1 diploma. As the names imply, the three teacher education programs for primary, junior secondary, and senior secondary school requires them to study for 2, 3, and 4 years respectively.

The higher education institutions involved in training teacher candidates consist of 12 Institutes of Teachers' Training (10 public and 2 private), 22 Faculties of teachers' training (18 public and 4 private), and 6 Teachers' Colleges (4 public and 2 private). These institutions are located in various provinces throughout Indonesia. The quality of the institutions varies a great deal. At present accreditation of those institutions are still under way following the accreditation process being conducted for all higher education institutions in the country.

It is expected that these 36 teacher education institutions can produce about 7000 graduates of primary school teachers to meet the demand. They are also expected to be able to produce the number of secondary school teachers in various subjects according to the need. To make a link and match between supply and demand of teachers, the government applies a quota to each institution, especially the public ones, regarding the intake of students joining the teacher training courses. However, the fact shows that there are still a large number of graduates which are still unemployed for not being recruited by the government. The problem does not lie in the inaccurate planning of teacher demand, but it is caused more by the budget constraint on the part of the government. For example recently the government recruited only about 2500 new primary school teachers, which is about a third of the number of teachers needed to replace those who will retire. As mentioned above, at present there about 20,000 primary school teachers who have not been recruited to become teachers.

In general, the existing teacher education institutions in Indonesia have more or over capacity to produce the number of teachers needed by the schools. It means that these institutions are inefficient. Because of that the government has recently decided that, in the next few years, 4 of 10 public IKIPs or institutes of teachers training are to be transformed to become universities. The main purpose for this is that universities are more flexible in meeting the demands of the society regarding the programs being offered. On the other hand, teacher education is less flexible since naturally they can only produce teachers where their demand is limited.

2. Input

The teaching profession at school nowadays is not regarded as a favourable occupation by the society. Not many students of high achievement intend to become teachers. Students who wish to enrol in the teacher education institution usually because they are not accepted by universities or they could not afford to study in universities. The data show that in general the average achievement of students enrolling in teacher education institution is lower than their peers who are enrolled in universities which have better prospects (see the results of scores of higher education entrance tests yearly).

3. Output

In general the existing teacher education has the capacity to produce teachers required by the schools. In fact they have over capacity and can become inefficient. The graduates of some of the programs being offered cannot be absorbed by the demand from the schools and the government. The over supply is caused by both the over production of teachers as well as the limited budget to employ teachers.

The quality of the graduates from the teacher education institutions generally is regarded as lower than their peers graduated from universities, regarding their mastery of subjects to be taught. Until recently, the curriculum of teacher education gave emphasis more on teaching methodology rather than core subjects to be taught. At present this problem has been readdressed to give more weight on core contents. The low quality of teachers, as mentioned before, is a reflection of the quality of graduates of these institutions. A study conducted by Balitbang (R&D Office in MOEC) shows that the main cause of the relatively low quality of graduates is the low quality of students enrolling in the institutions, and not because of the performance of the institution.

D. In-service Training

1. Re-certification program

As mentioned before since 1990 there has been a change in the formal minimum requirement of education for teachers in primary and secondary schools. The law requires that all teachers should be trained in higher education .The regulation requires that primary school teachers' education be upgraded from senior secondary education to DII level, that junior secondary school be upgraded from DI or DII to DIII level, and senior secondary school be upgraded from DIII to S1 level.

Since then there has been a massive training program to upgrade primary school teachers to obtain the DII diploma. The training program is conducted through distance learning mostly supported by the government. It is conducted by the Open University supported by its branches in the provinces. This system makes it possible for the teachers to join the training without leaving their teaching duty. This program however needs 3 years to complete, and not 2 years as in the full time (face-to-face) program. Now, 314,934 primary school teachers have joined the program. An evaluation study shows that the success rate of the program is only 56%. This is mostly due to teachers' lack of time in studying and their inability to concentrate on learning. Nowadays there are still about 600.000 primary school teachers (45years or younger) to be trained. It is estimated that they can be trained in 6 years time.

There is still little knowledge as to what is the impact of the training program after the teachers have finished it, especially on their teaching performance. There is also a big debate on whether the DII curriculum being applied in the training with emphasis on academic exercises is suitable for upgrading teachers already on service to upgrade their teaching profession. There is also a question of the cost-benefit of the training both for the teachers and the government.

2. Regular training program

Beside the recertification training program, there is a regular training or refreshment course for the teachers in primary and secondary schools. There are teacher training centres at the national level (PPPG) and training centres at the provincial level which provide regular teachers with training from time to time. The training programs are conducted to improve teachers' competencies in various aspects, depending on the felt needs. The training can be about contents of the subjects taught, teaching methodology, teaching or school management, knowledge of new curriculum, and so on.

Recently such training has been combined with the regular training based on a school cluster or grouping (PKG). In this case teachers in a group of schools undergo training which takes place in the centre school. It is expected that the training content is more relevant to their need and it can be conducted at a more flexible time. Beside that, there is more chance that more intensive discussion in a more informal way can take place which results in better understanding of the training content.

The issue related to this regular training is whether there is the desired impact towards improvement in their teaching practice after they joined the training. This has been the burning issue from time to time. A recent study (Nielsen, 1990 and Dagot et.al., 1997) shows that after undergoing training, teachers gain knowledge and skills from the training, but they tend to go back to their old habits in teaching practices.

II. ISSUES AND RESEARCH PRIORITIES

A. Issues To Be Addressed

Based on the description regarding the condition of teachers, pre-service, and in-service teacher training, there are important issues to be addressed by research activities as described below.

1. Why in reality and at the local level is there always a shortage of teachers on the one hand, and there is an over supply of teachers on the other? This happens between schools in one region, and also between regions. Why does this phenomenon occur among teachers of certain subjects?

2. Why there is always a mismatch between teachers' educational background and the subjects being taught?

3. Why is there always a problem related to the actual number of teachers in schools? Why can no institution produce data related to teachers which is acceptable to all parties concerned? How can good statistics related to teachers and teachers'education and training be obtained?

4. Why cannot many teachers master subjects to be taught, although they have a proper education background?

5. Why cannot teachers perform satisfactorily, even when they have proper teacher education background and training?

6. Why is the teaching profession not attractive? Why is it not respected by society, even when it admits the importance of their function? How can this situation be improved through, for example, a system of teachers' welfare and career development?

7. What is the impact of in-service training on teachers performance? Is the curriculum of the training suitable for achieving its goal?

8. What is the cost benefit of teacher training for both teachers and the government or society?

9. Does the teachers' promotion system using a credit system work, and does it have a positive impact in promoting teaching performance in general?

10. What is the actual need of the teachers regarding their teaching competencies? How need assessment can be conducted for teachers before they join any training?

11. What kind of reward and punishment system for teachers can be developed and applied which can improve teaching performance?

12. How can teachers and teacher education and training be managed more efficiently and effectively? How can all the relevant institutions or parties be co-ordinated to work together harmoniously to achieve the same goal?

B. Research Activities Being And To Be Conducted

The following topics are research activities being and to be conducted by the Research and

Development Office of the MOEC.

1. The impact of in-service teachers' training for all school levels.
2. The curriculum of teachers training centres at the provincial level.
3. Teachers competency in teaching certain subjects.
4. Profiles of teaching competencies of teachers at all school levels.
5. Reading interests and habits among teachers.

IRAN

1. A Brief Description of Teachers and Teacher Education

The education system of the Islamic Republic of Iran consists of one year pre-primary, 5 years of primary, 3 years of lower secondary, 3 years of upper secondary and one year of pre-university study. At the tertiary level of education, there are many different branches with different programs and durations. The 5 years of primary and 3 years of lower secondary are developed to provide general education and there is no streaming in the first 2 cycles of schooling.

Upon graduation from upper secondary schools, students can follow different paths to post diploma and higher education, one of which being teacher training programs.

Teachers working at public schools at all levels of education are government employees, there is however, a small number of private schools in the country - with coverage of about 3. 72 % of student population - whose teachers are not necessarily government employees.

Teacher training programs, at both Pre-service and In-service levels, are offered in different institutes and different lengths of time. Some of these programs are developed and executed under the auspices of Ministry of Education and some others, specially those offered by universities, under the auspices of Ministry of Culture and Higher Education.

In the academic year of 1995 - 96, there were a total of 793,735 teachers working at different levels of education, from whom 357,644 being at primary, 222,966 at lower secondary, 155,910 at upper secondary (theoretical, technical and vocational), and 57,215 at other levels (pre-primary and teacher training) of education. Additionally, 59,563 teachers were also working as contract teachers in areas that are faced with shortage. In these figures, 361, 953 of the total teaching force have been women; and separately by levels, 188, 869; 97, 847; 63, 113 and 12,124 of the teaching force at primary, lower secondary, upper secondary and other levels of education were women respectively. Finally, 36, 611 of the contract teachers were women teachers.

There is no difference between the working condition and salaries of men and women teachers, except some facilities which have been considered on behalf of women.

1.1 Pre-service Teacher Education

The teaching force for all levels of education is trained in different institutes and programs. Teachers for primary and lower secondary levels of education are trained at Teacher Training Centers, and teachers for upper secondary and pre- university levels are trained at universities. Teacher Training Centers are post secondary institutes that select their students from among the high school (upper secondary) graduates. Presently, these centers offer sixteen programs of study and after two years of study, their students receive an associated degree (A. D.) in their fields of study. The sixteen fields offered by these centers are Primary Education, Persian Literature, School Hygiene, Fostering Affairs, Physical Education, Arabic & Religion, Technics & Vocations, Foreign Language, Social Studies, Mathematics, Arts, Mentally Retarded, The Maladapted, The Blind, The Deaf, and Empirical Sciences. There are also some Technical and Vocational Teacher Training Centers whose function is to train necessary technical and vocational instructors.

Universities also offer teacher-training programs to supply necessary teaching staff for upper secondary and pre-university levels of education. Many of universities, in addition to their regular BA / BS programs, provide a minor field of study in teaching in all branches of humanities and pure sciences. Those students who choose these fields of study should go through some courses related to teaching and after graduation are obliged to work for the Ministry of Education. Ordinary graduates of universities are also another source for supplying the necessary man-power for teaching. These graduates can apply for teaching profession and after a few years of working under provisional contract, they are awarded tenure status by the Ministry of Education.

1.2 In-service Training

There are several kinds of In-service training programs which are designed to both promote and update teachers knowledge and skill. These programs consist of two types of degree programs and non - degree ones. The degree programs are offered by three different institutes: Teacher Training Centers, Higher Education In-service Centers and universities. The first two kinds of institutes are established by the Ministry of Education and work under its jurisdiction. Entering to these institutes for In-service higher education programs is confined to on-the-job teachers.

Another way for teachers to continue their education to higher levels is entering universities. To provide more opportunity for teachers, a large quota of admission to Payame-Noor University, which is the only university with distance education system in Iran, is allocated to teachers.

All the working teachers who have successfully passed the entrance exam and are admitted to these programs could take benefit from different facilities which are provided for them; such as non-continuous (summer) courses and enjoyment from being a part-time employee during the course of study. At the end of their studies, the teachers receive associated degree, BA/BS or MA / MS degree in their field of study.

The non-degree (certificate) In-service programs are short-term training courses which are provided for on-the-job teachers. There is no entrance examination for entering these courses, and only certificates are awarded at the end of program. Although there is not any obligation for attending such courses, there are some encouraging measures that motivate teachers to attend these courses. The most important measure is the promotion of employment level, which to some extent depends to participation in these short-term training courses.

It is worth mentioning that nearly all teachers participate in short-term training programs almost every seven years.

1.3 New Developments in Teacher Education

In order to improve the quality of teacher education both in Pre-service and In-service programs, some measures have been undertaken, the most important ones are as follows:

- Reviewing and approving all the teacher training curricula by specialized committees affiliated with the Supreme Council for Curriculum Development. It should be mentioned that in the Islamic Republic of Iran, any curriculum for tertiary level of education has to be approved by the Supreme Council for Curriculum Development in order to be considered as a credible higher education program. This recently undertaken measure is a positive step

towards upgrading the standards of teacher training programs by making it compatible with the curricula offered at universities.

- Checking and ranking Teacher Training Centers on the basis of their educational activities. Following the first step towards upgrading the educational standards of Teacher Training Centers, these centers were examined and evaluated with regard to their conformity with higher education institutes' criteria. Upon this examination, the active and acceptable centers were recognized and certified.
- Utilization of advanced multi-media education systems. The untraditional educational modalities systems such as distance education, correspondence education, self-study, mass-media education, workshop, as well as conventional modes of education are presently used to both widen and improve the short-term In-service teacher training programs.
- Holding nation-wide specialised teaching conferences. This provides teachers with a unique opportunity to share their experiences and also to hear the results of teaching oriented research presented by researchers. These conferences are held annually, organized by academic associations in different disciplinary areas and supported by the MOE.

1.4 Future Trends

Regarding the inadequacies of the present teacher training programs, new challenges, and upgrading the quality of these programs, different plans are being devised to be implemented after final approvement. Some of these plans are as follows:

- Establishing a new one - year long teacher training program for all the ordinary graduates of universities who are working as teachers or will be accepted for teaching profession. With the implementation of this program, those fields of study with minor in teaching could be limited or even eliminated from university programs.
- Establishing double specialization branches to train better qualified teachers for remote and scattered areas.
- Holding a comprehensive professional competency exam for teachers at certain intervals and promoting them according to their performance on this exam. The purpose of this plan is to define some new employment tracks with more stringent criteria for acquiring those levels.
- Establishing open learning system for In-service training program that leads to a degree. Since In-service training is an essential element in teachers development and there are always teachers who can not participate in conventional classes, a plan is under way to establish the open learning system, with more emphasis on correspondence and self-learning modalities.
- Among the most important courses designed for professional development of future teachers is the teaching methodology course. Yet this course has always been taught in a general way and, therefore, future teachers have had little exposure to teaching strategies relevant to their subject area. To overcome this problem plans are underway to train enough number of specialists to act as instructors in teacher training institutes and universities.

2. Research Priorities

Before the establishment of the Institute for Educational Research (IER), there were not any solid

policy for conducting research projects and for the identification of the areas of priority. Although the Research Council of the Ministry of Education was formerly established (1989), its function was mostly providing consistency in issues regarding research activities. By the establishment of the IER in 1996, a survey was launched through which the opinions of educators at ministerial and provincial levels, experienced teachers and university professors with regard to present problems and issues were collected. As the result, four areas were identified as the major priority areas for educational research. These areas are as follows:

- Developing creative thinking and scientific disposition in students.
- Religious/ moral and artistic development of students.
- Innovation in educational organization and administration.
- Strengthening students' attitude toward social responsibility and participatory behavior.

The Institute for Educational Research consists of seven research departments. Each group is mainly responsible for paving the way for research activities, being focused on the above mentioned research priorities and their implications for the specific realm of the departments. One of the research departments in the Institute is the Human Resources Development with major emphasis on teacher development. This departments has identified its research topics according to the above mentioned criteria and is presently involved with developing and/or collecting research proposals. The research topics will be discussed in the following section.

3. Research Activities

As it was mentioned before, the Institute for Educational Research is a newly established institute which commenced its activities at the beginning of 1996. However, before the establishment of the Institute, each one of the major departments headed by a deputy minister had its own unit for conducting research. From among 34 research projects which have been completed during recent years, 9 cases pertain to dissertations financially supported by the Ministry of Education and 25 cases to those which have been conducted or funded by the Ministry. From among these 34 projects, 13 cases have been oriented towards teaching content and methodology in teacher training programs and their conformity with teachers'subject matter and professional needs, 10 cases investigated the interest and attitudes of student-teachers towards teaching profession, 6 cases examined the structure of teacher training system and its effectiveness, and 5 cases focused on the shortcomings and inadequacies. It should be noted that since the foundation of the Research Council of the Ministry of Education in 1989, the date when organized research activities have begun, the research activities of all deputy minister's departments have been much more accelerated and consolidated, in a way that 23 of the research projects belong to the years following the establishment of the Research Council. To these projects, there should also be added 38 cases of comparative studies.

As mentioned earlier, one of the research departments in the IER is Human Resources Development whose attention is mainly centered on teaching and teacher development. The four research topics presently concentrated in by this department are as follows:

- Critical review and evaluation of the existing provision for human resources distribution and its impact on education system throughout the country.
- Examination of the efficiency and effectiveness of In-service training courses.

- Evaluating teacher training programs considering necessary professional skills for future teachers.
- Investigation of the qualifications of elementary level teachers for teaching religious and moral education courses.

4. A Glance at Educational Research Activities

Based on a positive attitude towards educational research and the necessity for consolidation and coordination of educational research activities, the Research Council of the Ministry of Education was established in 1989. By the establishment of the Council, the Center for Educational Research was also activated as the secretariat of the Council. After considerable inquiries, in 1992 the statute of an institute for educational research was drafted and approved. And finally by being accredited as a higher education organization, the Institute for Educational Research (IER) was formally inaugurated in 1996 as an affiliated institute with the Ministry of Education.

It should be noted that since the formation of the Research Council of the Ministry of Education, there has also been a rapid increase in the research budget of the Ministry. While before the establishment of the council, the total research budget did not exceed 0.07% of the current budget of the Ministry of Education, it has increased up to 0.14% in the years following the inception of the council. Furthermore, in 1997, in addition to the regular research budget of the Ministry of Education, another financial source under the program for National Scale Research Projects has become available which promises to diminish all the existing budgetary limitations.

In its short period of existence, the Institute for Educational Research has designed and implemented some innovative measures that will hopefully result in the betterment of teacher development, specially from the research point of view.

Some of the innovative and timely measures undertaken by the Institute for Educational Research are described in the following pages.

4.1 Teacher Researcher Program

In order to create and strengthen the research disposition in all teachers and give recognition those teachers who have already shown their interest in classroom research and creative encounter with teaching, the Institute for Educational Research has developed a new program called "Teacher Researcher Program".

The objectives of this program are to recognize those teachers who have undertaken action research in their classes, to strengthen teachers self esteem, to further develop motivation for research and innovation at classroom level, and to identify teacher researchers and disseminate their experiences in education system of the country.

Teachers from all levels of education - primary, lower and upper secondary, pre- university and teacher training - can participate in this competition. After evaluating all the research reports, the best ones will be selected and some positive rewards will be conferred upon the researchers. One of the most important rewards is enjoyment of one year sabbatical leave to get involved in research activities of their own interest. The procedure and advantages of this particular mode of expressing appreciation will be discussed separately.

4.2 Opportunity for Sabbatical Leave

Since its establishment, the Institute for Educational Research has adopted a number of measures to provide an appropriate basis for the professional development of teachers, specially those who have shown positive attitude toward research activities. One of these measures is to award teachers the opportunity for sabbatical leave. Accordingly, those teachers who are employees of the Ministry of Education and have met one of the following criteria, can enjoy one year long sabbatical leave. These criteria are:

- Being selected as a teacher researcher based on the Teacher Researcher Program.
- Having two accepted papers which have been either presented in scientific seminars or published in accredited journals.
- Having conducted at least one research project, meeting the quality standards of IER.
- Being selected as an exemplar teacher based on a program carried out annually by the Ministry of Education.

Those teachers who have fulfilled the criteria and have been awarded the opportunity for sabbatical leave, can take a one-year mission to one of the research institutes within the country and take part in activities, such as compiling papers with an acceptable level of being presented in seminars or published in journals, conducting a research project, carrying out a study program, or design of an educational media or equipment.

4.3 Interprovincial Research Cooperation

In order to consolidate research communication and promote exchange of experiences between neighboring provinces, and also taking optimum advantage of all existing resources in provinces, an interprovincial cooperation program has recently been developed and is being gradually implemented.

According to this program each 5 - 6 neighboring provinces are organized as a research club. For this purpose, the country has been divided to 5 research clubs, the main functions of which are:

- Conducting joint interprovincial research projects.
- Organizing joint seminars aimed at disseminating research findings.
- Holding regional training courses/ workshops.
- Adopting necessary measures for utilization of research findings at regional level.

Member provinces of each research club have regular coordinating sessions to make decision about their common research policies and programs.

Presently three of the clubs are formed and active. They have started their joint research projects the topics of which are in compliance with both the priorities of the region and with those of the Ministry - wide research priorities. These research topics are as follows:

- The study of school and home factors pertinent to the development of creativity in primary level students.

- The effects of different modalities entailing teacher active participation in moral development of students at primary level.
- Studying the educational impact of how upper secondary school students spend their leisure time.

Establishing such regional research co-operations has consolidated research activities in the member provinces and will help to promote the quality and effectiveness of educational research.

4.4 Computer Network and Information Services

Upon the establishment of the Institute for Educational Research, the computer center of the Institute was also established. This center is one of the centers that provide educational information services for the Institute researchers as well as other audiences. This center is presently equipped with widely known databanks such as Psyclit, ERIC and Dissertation Abstract. At the national level, it has developed or linked up to several databanks that would be, as a whole, a great source of information for researchers and provide such services which are rarely accessible in the country. These databanks are as follows:

- Educational Resources Databank, consisting of bibliographic information about all educational resources, including books, research papers, dissertations and articles which are compiled in Persian language. Presently, this bank contains about 9500 documents.
- Electronic Journals. The computer center of the Institute is presently developing the electronic version of all specialized journals in the fields of education and psychology.
- Education Circulars. This databank contains all the circulars issued by different departments of the Ministry of Education.
- Comprehensive School Database, containing updated information about schools throughout the country.
- On-going Research Databank, maintaining the latest necessary information with regard to the state of projects being conducted within the Ministry of Education throughout the country.

Almost all the Provincial Research Councils are connected through network to this computer center and can take benefit from all these research facilities.

In addition to these services, the computer center also provides information processing services for the research staff and organizes training courses on educational databanks as well as statistical softwares.

The computer center of the Institute is also networked with Internet and provides networking communication services for the Internet users.

Japan

I. Today's Teachers and Teacher Education in Japan

1. Trends in Educational Reform

1-1. Reform of Japanese Education in the Perspective of the 21st Century

The Central Council for Education reorganized by the Ministry of Education, Science Sports and Culture (Monbusho) in April 1995 submitted its first report in July 1996. In the report, the Council reflectively summarized the shift of postwar Japanese society and life. The Council set forth the reconstruction of the social structure and the national lifestyle, by which 'the life without room to grow', weakening of links in local communities and degeneration of educational function in families have been caused. The Council also offered the model which aims at giving children greater zest for living in a period of turbulent change (the qualities and the abilities to identify problem areas for themselves, to learn, think, make judgements and act independently and to be more adept at problem-solving, a rich sense of humanity, and a healthy body, regardless of the way in which society changes).

In the report, the subject of improving the qualities and the abilities of teachers has been taken up as a prime part of the task of improving education in general. Therefore, the Council has requested educational administrative sectors to complete the administrative steps for teacher education.

1-2. Progression of Administrative Reform and Decentralization

The Japanese Government, especially Prime Minister, R. Hashimoto has tackled an administrative reform for a small government in the direction of relaxing restrictions and reducing the number of government officials in order to break the difficulties, such as population problems (a decreasing of children, an increasing of the aged), economic crisis (a depression, trade friction), political confusion. Because of the direction, Monbusho has been requested to unify itself with other ministries, still more, to integrate its belonging institutions, and to transfer administrative power to local boards of education or local governments.

In these contexts, national universities and faculties of education were urged to start on a new task to reorganize themselves and to reduce the regular number of staff and students. Monbusho also started to reconsider their annual plans, especially those for increasing the number of regular elementary and secondary teachers.

1-3. A Serious Situation of Juvenile Delinquencies and Maladjustment to Schooling

Recently, suicides or homicides of pupils caused by bullying have occurred frequently. Violent crimes are also often seen. Moreover, sexual crimes and infant abuse spread even among teenagers. The number of children who refuse or hate to go to school by mental diseases stemming from various problems in their families or schools is increasing.

These embarrassing problems can be seen not only in children's lives, but also in teachers'. Some teachers have committed offenses, for example, suicide as a result of troubles in teaching, sexual-harassment to pupils, refusal to go to school, a long term absence from school owing to mental diseases, corporal punishment on their pupils (sometimes leading to incidental injury cases), and so

on.

To meet with these mental health problems, Monbusho has prompted the arrangement of school counselors, stringent judgment on the competence of teachers, reconstruction of the curriculum for pre-service education of teachers, and development of effective programs concerned with mental health and counseling.

2. Actual Figures and Problems of the Present System

2-1. Status

The status of teacher is guaranteed by law, more tightly than that of the general public employees. These tight restrictions characterize the work and duties of teachers.

A teachers' certificate is indispensable to be employed as a teacher, which is awarded by a prefectural board of education. There are three types of the certificate, that is to say, general, special, and provisional. The requisite for each is qualified by law.

General certificate is further classified into three types based on the fundamental qualifications, that is, degree of master, bachelor, semi-bachelor. A regular teachers' certificate offered by a prefectural board of education is valid in all prefectures and throughout his/her life.

The special certificate was established in 1988 to employ a competent person without any teaching certificates as a qualified teacher. This certificate, also given by a prefectural board of education, is valid only in the prefecture where it is offered and qualifies the teacher for not more than 10 years. A provisional certificate (the validity is limited to 3 years) is given to be an assistant teacher by a prefectural board of education, only when they are not able to employ a teacher with a general certificate.

To be a principal and a vice-principal, a professional certificate is not required, but a general teacher's certificate and teaching experience (more than 5 years) are required. To be a higher educational teacher, no certificate is required.

2-2. Pre-Service Education and Training

1) Principle

Elementary and secondary school teachers are trained in universities (including graduate schools) or junior colleges approved by the Minister of Education and its basic structure is defined by the Law for Certification of Educational Personnel. The law limited qualified persons to university graduates who obtained the credits established as a minimum standard, and most universities have provided many subjects according to their facilities and their particular philosophy. As a result, teachers, especially secondary teachers, have studied in various types of institutions. The university's autonomous position in pre-service education has been the principle in the postwar period, based on the reflection of traditional normal schooling, aiming to expect the development of teachers and the prosperity of a new educational science.

This open system has contributed not only to supplying various types of teachers to schools, but also to popularizing an educational way of thinking and behaviors in the society. But, as a matter of practice, the system did not work so well because it undersupplied "good" teachers while it

oversupplied qualified teachers.

2) Supply

Most of the elementary school teachers are trained in four-year courses of elementary teacher education at national universities. Lower secondary school teachers are trained at universities or junior college courses, while upper secondary school teachers have attended universities or graduate schools. But recently, looking at new teachers, one can see that the number of those who graduate from junior colleges is decreasing, while alumni from graduate schools are increasing, especially in the upper secondary schools. In lower secondary schools, the number of new graduates from pre-service courses of national universities is increasing.

These matters imply that pre-service education of teachers in Japan has more students with higher educational backgrounds, so that the number of well-educated teachers increased gradually. Regardless of such a desirable stage of educational level, the public respect for teachers' qualities and abilities are generally fading out.

3) Curriculum Development

Having much knowledge does not necessarily mean teaching well. There is a lack of practical instruction skills because teacher educators in universities tend to be academic-oriented.

With the rewriting the relevant laws to improve this situation, since the fiscal year 1990, universities have been offering some new compulsory subjects which include subjects on educational methods and technology, student guidance and educational counseling.

But the situation has not improved much so that the relevant laws and standards for the pre-service education of teachers will be revised again to introduce much more practical activities into the curriculum for the courses, such as volunteer activity in social work and outdoor exercises. In addition, for a lower secondary school teachers' certificate, it will be requested by the law to extend the teaching practice period from two to four weeks.

4) Faculty Reform

Japanese universities and colleges, especially private schools, now stand at a turning point to continue the pre-service education of teachers, or to renounce it. The point is whether such higher institutions' education will be able to correspond with social demands and offer courses for the above-mentioned practical subjects, making the most of their limited budget. Recently, most of the national universities which have the faculty of education, have struggled with the reform of the faculty, trying to change their traditional teacher training courses to contemporary and synthesized ones by cutting down the number of regular students in teacher training courses.

2-3. Recruitment

1) Demand

Teachers of elementary and secondary schools are recruited through selective process from those who hold a teacher certificate. Over the last several years, the number of applicants by far exceeds that of teachers required. This problem has led the institutions of pre-service education of teachers to abolish or reduce the courses of pre-service education.

2) Selection Procedure

On the other hand, the methods of selection and screening of applicants has been improved and diversified, because of a few employees for a great deal of applicants. For example, practical skill tests, personal and group interviews with micro-teaching or debating, essays, aptitude tests, the estimation of extracurricular activities, volunteer service, and records for teaching practice, have taken effect in the selection of teachers.

3) Alleviation of Measures

The Government has worked systematically to attain the legally established standards in class sizes and staffing levels of teachers and other personnel in public compulsory education and upper secondary schools. As a result of this effort, class size has been reduced to 40 students or fewer in elementary and lower secondary schools. But, the number of school children is too drastically decreasing due to the declining birth rate to maintain the size of school. Moreover, it is necessary to change that improvement plan based on the present retrenchment policy. Therefore, the selection for a teacher is becoming more competitive so that it is difficult to become a teacher.

2-4. In-Service Education and Training (INSET)

1) Responsibility

Teachers must be motivated toward self-education and are required to undergo continual training during their career for the sake of the professional responsibilities. As the Law for Special Regulations Concerning Educational Public Service Personnel (enacted in 1949) says that educational personnel and staff are requested to engage themselves constantly in research and training. The law prescribes that Monbusho and local boards of education should help educational personnel and staff in various ways and provide them with opportunities for INSET.

2) Opportunities and Contents

Therefore, the central and prefectural governments, municipalities, and individual schools provide a variety of INSET programs for beginning teachers and experienced teachers on the effective teaching of each subject or comprehensive one, moral education, student guidance or school management. There are also off-the-job training programs (i.e. long-term training assignments) on which in-service teachers are sent to universities, research institutes, and even private-sector companies or other organizations. In addition, there is some short term training abroad for teachers in elementary and secondary school.

3) Beginning Teachers Training

For a period of one year from their date of appointment, beginning teachers must follow the induction training program of practical instruction while engaging themselves in teaching and other educational activities under the guidance and supervision of advisory teachers, both in and outside their schools. Therefore, beginning teachers follow in-school training (approximately two days a week, at least 60 days a year) individually, and out-of-school training (approximately one day a week, at least 30 days a year) collectively at an education center and other facilities. Monbusho provides training 'cruises' for those teachers recommended by the boards of education, too.

4) Experienced Teachers Training

The programs for experienced teachers are gradually being expanded and systematized, on the one side by means of subsidies from the national treasury, and on the other side by practical research on the INSET. This kind of training is provided throughout Japan for teachers with five, ten or twenty years' experiences. There is also another kind of training for better school management for chief teachers, school principals and vice-principals at schools.

5) In-School Training and Research

In Japan, although the importance of school-focused or school-based INSET has been recognized generally, training and research taking place at school leaves much to be improved owing to the pressure of teachers' daily work and the absence of effective school leaders.

II. Present Priorities for Research and Development Work on Teachers and Teacher Education

1. Trends in Research and Development Work

1-1. Province

1) Research into Professionality and Professionalism of Teacher

While the quality and ability of teachers must be one of the crucial factors to affect the quality of school, it is difficult to define the qualities and abilities that teachers should possess. To define these, there are case study projects on effective teachers. There are also studies using questionnaires and interviews to teachers, children or parents about the qualities and abilities that teachers should possess.

These studies have raised public discussion concerned with professionality and the professionalism of teachers. Through the discussion, a recognition has been produced that the teaching profession is a professional occupation not the because teacher monopolizes the special knowledge and skills like the medical doctor or lawyer, but because the teacher engages him/herself in educational practice with a broad and humane understanding of human beings and human society, reflecting on his/her own educational activities. On the other hand, the discussion leads some teachers to think that teaching is a profession because teachers 'master' the teaching principles. But even now, what kind of qualities and abilities teachers should possess is one of the most controversial issues.

2) Research into Professional Development of Teachers

How shall the quality and ability of teachers be raised? What will promote them? Studies on life course of teachers, their life history, the professional development of teachers and staff development are to answer these questions. Through these studies, it has been made clear what experiences and learning influence teacher development at each professional stage. It has been grasped that the experiences in the first school as a teacher, change of schools during service, events and changes in private life such as marriage, childbirth or illness, have important meanings for teacher development.

Based on the results of the research, each prefectural education center developed systematic

programs of INSET, in some cases of teacher education as a whole which indicate for teachers when, where, and how teachers should be trained and what is necessary to carry out their duties at each stage of their lives. Educational administration concerned with personnel has become part of the research, too.

1-2. Current Issues and Problems

1) Essential Problems

It is recognized that a teacher will develop certainly but variously so long as he/she is given an appropriate stimulus on a suitable spot with good timing. But it is difficult to give the stimulus to each teacher because teachers are various, and because environmental conditions around a teacher vary with teachers.

In order to correspond with those varieties, it is an important problem to arrange the systematic program of teacher education to be more flexible, including the tasks common to all teachers.

Especially, it has been said that pre-service education of teachers in universities and colleges is not useful to teaching profession. It was discussed recently whether or not certificates for vice-principals and principals should be provided by a law, because training programs for school leaders have not been arranged enough to meet with the expectation of their roles in society.

After all, one of the most essential problems in Japan is that both education and research in universities at present are not considered useful enough. However, it would be difficult to make them useful because university faculty members tend to consider their institutions as an 'ivory tower'.

2) Fundamental Issue -- Promoting School-Based Management (SBM)

'School-focused' or 'school-based' is seen to be important not only for INSET but also for the educational system as a whole, such as development of curriculum, textbooks and other educational materials, teaching media and methods. Schools cannot solve many problems by themselves, partly because those problems are connected with issues of family and/or society, and because they are not functioning as a well-organized body.

In order to support schools' efforts to improve themselves, there are research projects conducted to find out what are promotive and obstructive factors. Through the projects, strategies and tactics to improve each school by itself are examined and investigated.

Through such projects, it has been pointed out how the school principal should show leadership to the staff, how such school innovators have to behave, and how the culture of teachers or the organizational culture of the school affects school improvement.

One of the most controversial issues is to find out what effective leadership of the school leaders is like. Another issue is to search for the effective organizational culture of school to help enhance the quality of the school. To sum up, the most fundamental issue is to promote SBM for a school to be an autonomous body with the effective support of educational administration and research.

3) Developmental Task - Establishing the Collaboration between Researchers and Teachers

In order to promote SBM leading to a school's ability to improve itself, a supporting system is needed, which collaborates among schools, administrative organizations, universities and colleges, and other related formal as well as informal bodies. It is a problem how those collaborations shall be effective.

The most important question here is not the matter of the objectives of the research, but the matter of the method of the research. In order to make autonomous schools, what is indispensable is the effort in making the most of collaborative means among institutions/bodies concerned.

Japanese schools have been criticized to being too closed to the surrounding communities to understand what is happening inside them. Japanese teachers tend to shut themselves up in their schools, much more in the classes of which they are in charge. The educational administrative staff has an inclination to be unconcerned about other sectors, even the educational sector. Therefore, many educational administrators know little about the actual situation of education except for the matters of which they are in charge. Universities are functioning rather closedly and academic staff tend to shut themselves up in their offices, too. In Japan, each sector of education and educational research is isolated. It is not too much to say that.

In this situation, to construct collaboration means needs research itself needs to be collaborative, that is, it has to work out a program for the co-operative study on SBM. It is an important but a very demanding problem to develop that program.

2. Points of Attention in Research

2-1 Constructing Effective Continuity of Teacher Education

An idea of continuity of teacher education was suggested by the James Report in 1972 in the United Kingdom for the first time. After this report, the Central Council for Education in Japan accepted this concept in the Recommendation of 1978. Since then, many plans to reform the teacher education system have been advocated with the emphasis on continuity, and the idea of continuity has been gradually accepted in Japan, so that no plan can exist without considering this point of view.

However the concept of continuity is understood in various ways, at least, there are two streams. The one is to integrate some stages of teacher education in the light of required standards. The other one is to develop teachers constantly from university level to professional level. The former is the task of the authorities concerned who should provide programs and opportunities. The latter is the responsibility of teachers themselves. On the condition that the two streams just engage each other, the continuity of teacher education will be effective.

In order to construct effective continuity of teacher education, it is necessary to find out how busy teachers are in their minds; they engage themselves in many training courses unwillingly offered by some authorities. Thus, we need to conduct research on how to produce an effective environment for them. One possibility here is to pay attention to the fact that there exists some kind of wastage in the above-mentioned three stages of teacher education. Thus, what is needed is for the authorities to understand that it is important to distinguish each ones' proper roles and to clarify their limitations. This will not only eliminate waste but also help teachers who are pressed with daily work and other

duties including obligations in INSET.

2-2. Developing Teachers in Their Own Life-Span by Their Own Efforts

An ability and quality to teach pupils satisfactorily, to resolve unforeseen problems, and to adjust to unpredictable situations are essential for teachers. These aptitudes are developed not only through formal education but also through informal circumstances.

In other words, teacher development depends upon the efforts of teachers themselves. Moreover, as education itself depends upon the interaction between teaching and learning, teacher education should not be discussed only from a viewpoint of how to educate, but also how to learn. However hard one may intend to educate teachers, unless teachers themselves are eager to learn, the system of teacher education shall be 'a form without substance'.

In addition, knowledge and teaching skill actually change according to the progress of our society. Perhaps it will be more rapidly changing from now on. It is impossible to organize all of these into formal education. That is to say, teacher education should not so much consider covering everything. One suggestion here is that authorities should leave things to teachers' autonomous efforts as much as possible on the condition that the authorities improve working conditions to reward their efforts.

These ideas may lead researchers to realize continuity in the teaching profession based on the independence of teachers and the perspective of teacher life-span development.

2-3. Education for the Near Future

In Japan, shocking cases have been occurring continuously. Pupil-suicides stemming from bully are quite frequently seen. Last year, a religious sect including many graduates and students of very famous universities committed mass murder. According to their remarks, they tried "to destroy ugly Japanese society". In May 1997, a third-year pupil of a lower secondary school (grade 9) killed a boy aged 11 in the neighborhood, and cut the head off the body which he displayed on the gate of his own school with a statement blaming compulsory education.

These cases should not be attributed entirely to education. However, education must be one of the major causes. Certainly, some measures to meet those problems have been taken up. In many cases, however, it was too late to solve them. What is necessary is to attempt to prevent incidents before actually they happen. Although some causes as examination hell (highly competitive entrance examination into higher levels of educational system) have been discussed for a long time, we found it so difficult to discover effective means to solve the problem.

In this context, what is necessary in the field of teacher education is for teachers to acquire not only abilities to solve problems they are facing at this moment, but also some insights into future problems.

III. Research Activities Being Undertaken or Planned with Respect to Teachers and Teacher Education by NIER

1. Project of Co-operative Research into School-Based Improvement

This project was started in 1993 on the base of the previous research projects mainly conducted by

the Department of Educational Management. It has been expanded organizationally and financially up to the present.

<*Purpose and Objectives*> The purpose of the project is to promote school-based improvement. There are three objectives of the project. The first is to store up effective results of research and to dispatch effective information for use both at home and abroad. The second is to collaborate with persons who are not only authoritative researchers but also keen practitioners of education (supervisors, school principals, other educational administrators and teachers), to be practical and developmental research. The third is to present an initiative model of INSET program for school improvement to schools and education centers, and to verify the effectiveness of that model through action research co-operatively and formatively.

<*Organization*> One of the characteristics of this project is its cooperative structure to attain the common goals. The organization of this project is composed of the management sector (the advisory committee and the promotive committee) and the research sector (divided into the basic and the practical research) under the control of the director. Under the guidance of the advisory committee, the promotive committee makes policies, plans and conducts evaluation for some programs. The sector on basic research takes charge of theoretical analysis for the some research topics, and makes an initiative model. On the other hand, the sector of practical research determines the effectiveness of the model through the practical seminars and practices in co-operation with local education centers.

<*Results and Issues*> It has been recognized extensively that this project is effective, not only directly to promote school improvement, but also to promote research practically. Effective information concerning research and practices has been accumulated to respond to various inquiries from researchers and teachers.

At present, we can point out the following:

1) Strengthening the leadership of school principals does not always lead to the improvement of school. A key point here is to make the most of middle-experienced teachers.
2) Apart from the existing INSET program for learners to become school managers, it is important to develop another INSET program especially for experienced teachers to improve themselves as educational practitioners throughout their career.
3) Regarding the improvement of schools, such organizations as Monbusho, local boards of education and schools differ in their opinions. It is necessary to reach consensus among them.

2. Co-operative Research with Grants-in-aid of the Monbusho

2-1. Research into School Evaluation

The objectives are to clarify the actual state of school evaluation and the obstructive factors and conditions against effective evaluation. Especially in this research, it is intended to develop co-operative evaluation methods with a school and the outside agencies, referring to case studies abroad as well as the past Japanese experiences. Furthermore, it deals with the 'organizational culture' of schools, which prevents schools from innovating themselves.

2-2. Research into the Promotive Factors for Teacher Development

The purpose is to clarify the process of teacher development along with case studies in detail. This research is based on the results of research projects which have been tackled by specialized members, with much expectation of the findings. It has started examining what are the minimum requirements for qualities and abilities of teachers.

2-3. Research into the Influence of Teachers on Upper Secondary School Students Concerned with Learning about Lifestyle

In Japan, one teacher is supposed to take charge of not only teaching the subject but also guidance and educational counseling in general. In adolescence, students tend to regard their teachers as 'the significant others', and to follow them as ideal models. This research purposes to clarify the situation of that identification, and to reconsider the lifestyle of teachers which would influence their students' lifestyle. This research has been tackled with the Department of Educational Management of NIER in co-operation with schools and outside researchers.

2-4. Research into the Actual State of School Organizations and Teaching Activities

This is the most fundamental research on a large scale above all, of which purpose is to clarify the actual state of school organizations and teaching activities. The ultimate purpose is to clarify the roles and functions of schools and teachers in rapidly changing society. The committee of the Japanese Association for the Study of Educational Administration planned this research and the members of the association promoted it, including some NIER staff.

3. Co-operative Study on the History of 'Educational Faculty' in Japan

This study was started in 1989, by a voluntary society named the Society of Teacher Education & Educational Science (TEES). TEES is organized by various researchers with a variety of academic backgrounds, interests, ages, places of work, and so on, but who share common views that the relationships among educational researchers, teaching of pedagogic theories and educational practices are not functioning well.

As the present author is a representative of TEES, after being transferred to his present post in last April, this study has been placed on the work of the Division of Teaching Profession of NIER.

Through the activities of TEES, we would clarify historically negative and positive aspects of the structure and functions of the 'Educational Faculty', and to develop teaching methods to educate students to be good teachers through observation of each other.

Lao P.D.R.

The situation of teachers and teacher Education

The rapid growth in the enrolment of students has necessitated the recruitment of a large number of teachers at all levels of education. The number of teachers in primary, lower secondary and upper secondary schools increased by 57.46, 164.09 and 414.20 per cent respectively during this span of 16 years. In the case of kindergarten teachers, the increase is 740.07 per cent. The average rate of increment in the number of primary, lower secondary and upper secondary teachers has been 614,319 and 208 per year, the maximum occurring, during the period 1984-85 and 1985-86 (2,963 for primary, 1,673 for lower secondary and 544 for upper secondary).

The demand for teachers created by the rapid growth of student enrolment outstripped the supply of trained teachers from the teacher training institutes. As such a substantial number of untrained and unqualified teachers were employed at different levels of education in the provinces of Lao PDR during the year 1987-93. On an average the percentage of unqualified teachers in primary, lower secondary and upper secondary schools during the year 1987-93 were 35.61, 13.77 and 16.54, respectively.

The provision of opportunities to unqualified teachers for upgrading their qualifications has been limited. Only residential training has been provided and feasibility of distance education has not yet been explored. Teachers have been central to any instructional activity. They largely influence the quality of instruction, the institutional climate and thus the quality of the student product. The current educational policy of Lao PDR recognises this and places a high priority to the reform of teacher training in order to improve the quality of teachers.

Teacher Education

Teacher Training School/Institutes

Teacher training schools have been established separately for training crèche teachers for and kindergarten, primary, lower secondary and upper secondary schools. In addition, there were schools for training physical instructors, Arts teachers and teachers for monks and minorities. All of these schools were not single schools. Some of them existed together. For example, there were cases, in which a primary teacher training school, a kindergarten and crèche teacher training school or a lower secondary and primary teacher training school existed together in the same building and under one management.

In 1987-88, there were three institutes: one the Institute of Pedagogy (IUP) (Institute Universitaire de Pedagogie, Vientiane), Dongdok and the other two its extension centers at Savannakhet and Luang Prabang offering programs for training upper secondary teachers. The number of lower secondary teacher training institutes were thirteen: one in each province except for the provinces of Bokeo, Borikhamsay, Sekong and Attapeu. There were four other lower secondary teacher training schools: one for monks, one for vocational teachers, one for Arts teachers and one for training physical instructors.

The number of preschool and primary teacher training schools increased from 17 in 1980-81 to 41 in 1989-90: an increase of 141.17 percent. Compared to this, the enrolment in these schools increased only marginally, i.e. from 4,346 in 1980-81 to 4,870 in 1989-90 (an increase of 10.01%).

The number of lower secondary teacher training schools also increase from 12 in 1980-81 to 16 in 1989-90: an increase of 33.33 per cent. The enrolment decreased by 48.55 per cent (5,538 in 1980-81 to 2,849 in 1989-90).

The number of teacher training institutes for upper secondary teachers were one in 1980-81 and increased to three in 1988-89, when two extension centres of the IUP were set up .

There has been a very substantial increase in the enrolments of upper secondary teacher trainees. It went up from 1440 in 1980-81 to 2,671 in 1989-90, an increase of 85.48 per cent.

Teacher Training System

Different systems of training teachers for crèche, kindergarten and primary schools were in operation in different provinces of Lao PDR. There were instances where more than one system of training were in operation in pre-schools or primary teacher training schools. In addition, there have been quick changes from one system of training to another. These quick and frequent change in the training programs seriously affected the instructional effectiveness of the teachers. This were especially so when the change were not backed up by the supply of instructional materials, training of staff and the required infrastructure facilities.

There were sixteen lower secondary teacher training schools in the country in 1988-89. Three different training systems were in operation in these schools. These were 8+3, 11+1 and 11+3 system being the most common.

Most of these primary teacher training schools were following the training system of 8+3 and 11+1. However, the systems of 5+3 were also in operation in some of the schools.

There were three institutions in Lao PDR which train teachers for upper Secondary Schools, the IUP at Dongdok, Vientiane and its two extension centers at LuangPrabang and Savannakhet. The system of training is 11+4: that is, four years of training after Grade 11. There were, however, one year of preparatory instruction for those students who lack entry prerequisites for the four year training program.

The large number of different training systems being followed for training teachers for pre-schools, primary and lower secondary schools put a great demand on the variety of resources such as textbooks, other curriculum materials, laboratories and equipment required for effective implementation of the curriculum. Management of instruction also became difficult when different systems of training were in operation at the same institute.

Curriculum Development

Pre-school Teacher Training

Out of the total of 2,376 contact hours, in the 8+3 curriculum recently introduced, the percentage of time allotted to the group of subjects is depicted in Table 1. The curriculum is well-balanced in terms of the time allotted for pedagogical and other subjects essential for child development. However, the implementation of the curriculum does not take place as practical work. Teacher trainees experience difficulty in the learning of content prescribed for mathematics and population education.

Table 1: Curriculum Structure: Pre-school Teacher Training

Subject	Time (%)
Health, Physical Education and Labor Work	29.5
Language	4.6
Music, Dance, Drawing and Handicrafts	31.8
Math for children	2.6
Administration	3.0
Population education	8.0
Psychology and Pedagogy	14.0
Foreign Language	7.5

Primary Teacher Training

For the primary teacher training there were three systems of training in operation, i.e., 5+3, 8+3 and 11+1. The latest are 8+3 and 11+1 which were introduced in 1986-87. The percentage of time allocated for the different groups of subjects is given in Table 2.

The curriculum consisted of a large number of subject with many topics. Almost all the subjects continue over the entire period of three years. As a result of this, the students found it very hard to assimilate what has been taught. Almost all the time provided in the curriculum has been spent, on theoretical instruction expect for eight weeks in the last year, which have been devoted to teaching practice. The students experienced a great difficulty in learning the content prescribed for Mathematics. The curriculum has had a theoretical orientation and lacks emphasis on training in laboratory experimentation and practical work.

Lower Secondary Teacher Training

There were two training systems in operation for training lower secondary teachers, i.e., 11+1 and 11+3 training system was the latest and offered specialization in four areas. i.e., Mathematics and Physics, Biology and Chemistry, History and Geography and Literature.

Table 2: Curriculum Structure: Primary Teacher Training

Group of Subject	Time (%)
- Psychology and Pedagogy	9.5
- Mathematics, Physics, Chemistry and Biology	41.3
- Lao Language and Literature	16.8
- History, Geography and Political Thoughts	13.4
- Agriculture, Home Science, Artisan work, Industrial work	8.9
- Music, Art, Physical Education, Drawing and Writing	3.4
- Foreign Language	6.7

There were two major component parts of the curriculum for each specialized area. Part "A" consisted of subjects related to the area of specialization and Part "B" contained subjects which were common to all the areas of specialization. Curriculum for the other specialized areas also consisted of a total of 15 to 19 subjects with three to seven subjects per semester.

Part B of the curriculum for all the specialized fields consisted of five subjects. The number of these subjects taught in each of the semesters is given in Table 3.

Table 3: Curriculum Structure – Part B common to all specialised areas of training lower secondary teachers under the training system of 11+3

No	Subjects	Year Semester	Time in Hours per Week						% Times Allotted
			I		II		III		
			1	2	1	2	1	2	
1	Philosophy and Political Education		2	2	2	2	2	2	6.82
2	Pedagogy		3	3	3	3	0	0	7.36
3	Psychology		3	3	3	3	0	0	7.36
4	Foreign Language		2	2	2	2	2	2	6.82
5	Sports		2	2	2	2	2	2	6.82
Number of weeks			15	15	15	15	15	15	

Considering Parts A and B of the curriculum, the number of subjects per semester in all the areas of specialisation vary from 8 to 12. The curriculum appears to be heavy in terms of the number of subjects covered in each semester. Apart from the large number of subjects, the curriculum content for many of the subjects is heavy. Both the teacher trainers and the teacher trainees experience difficulty in the delivery/learning of the content.

The ratio of the time allotted for the subjects belonging to the specialised fields (Part A) and other common subjects (Part B) is 3:2 which is fairly balanced. The curriculum does not indicate any separate allocation of time for laboratory or exercise work. In the absence of laboratories workshops in the teacher training schools, the curriculum implementation is highly theory oriented. The time allotted for teaching practice is less. Teaching practice in the schools need to be preceded by micro and simulated teaching at training school it self, so that the student teachers are able to acquire teaching at the teacher skills prior or practice in the schools.

Upper Secondary Teacher Training

There are eleven programs of study offered for training upper secondary teachers. Analysis of the curriculum of two of these program, i. e., Mathematics and physics and Educational Psychology and Pedagogy are presented.

The curriculum for Mathematics and Physics consists of a total of 24 subjects. These are distributed over ten semesters, the first two being part of the preparatory year. In all semesters the number of subjects that are included vary from 6 to 7.

The major group of subjects in the teacher training program for Mathematics and Physics with their time allocation is given in Table 4.

Table 4: Curriculum Structure: Upper Secondary Teachers Training – Mathematics and Physics Teachers

Group of Subject Allocation	Time (%)
Mathematics-Analysis, Algebra, Geometry, Probability Statistics, Mechanics	40.0
Electricity, Electrotechnics, Thermodynamics, optics, Atomic and Nuclear Physics, Astronomy, Physics Laboratory	22.7
Foreign Language	10.7
Librarianship	1.0
Physical Education	1.0
Population Education	11.0
Psychology, Pedagogy, Teaching Practice, Math and Physics Methodology	11.0
Paramilitary training	2.0
TOTAL	100.0

The distribution of time among the different subjects in the curriculum appears appropriate. The ratio between the time allocated for theory and practice which includes class exercises, laboratory experimentation and teaching practice is 54:46. The proportion of the time allocated for physics laboratory is 12 hours and is 18 per cent of the time allocated to Physics and its related subjects. The curriculum weightage to theory and practice is well-balanced. However, the time allocation for laboratory experimentation (18%) is much less than that provided for theoretical instruction in physics and its related subjects. The teacher trainers were of the view that the curriculum includes too many subjects. According to them there is a need to decrease the theoretical content and provide more practical orientation to the curriculum.

The curriculum of upper secondary teacher training program in the area of psychology and pedagogy is aimed at producing teachers for teacher training schools. The source of trainees taking up this program are two : (i) those who have passed grade 11 : and (ii) teacher who with to upgrade their qualification/training.

Curriculum Review

The number of weeks per year are 16 and the hours of teaching per week vary from 29 to 32. The time distribution for different activities in a year of study are the same in all teacher training programs for all levels of education is as follows:

Table 5: Extra-curricular activities at all levels of teacher training programmes

Activity	Time in Weeks
Classroom instruction	32
Preparation for examination	2
Campus cleanliness	5
Population Education	2

Paramilitary training	3
Holidays between semesters	2
Holidays between years of study	4
Holidays for different festibals	1
Miscellaneous	1
Total.	**52**

The curriculum documents for all the teacher training programs at the preschool, primary and lower secondary level are well-written. General objectives are written at the subject and topic level. Content is described for each topic. The curriculum also lists the time allocation for different activities, but does not indicate the time allotment for practical/class work and the scheme of student evaluation.

The curricula of teacher training programs at all levels of education are heavily tilted towards instruction in theory. There is thus an imbalance in theory and practical instruction. Curriculum needs to be more practice oriented. Secondly, the curriculum of all the teacher training programs includes a large number of subjects and topics. There appears to be no systematic procedure followed in developing the curriculum which ensures its validity, relevance and effective implementation by the teacher trainers. There is no unit responsible for systematic development, evaluation and revision of the curriculum, Nor is there any significant participation of curriculum implementers in the process of developing curriculum.

Training Methods and Instructional Materials

In the pre-school and primary teacher training schools, it was observed that all the teachers use the chalk and talk method of teaching. A few of them, sometimes make use of charts and models in their lesson .All of them resort to dictation of notes. The students are passive and hardly interact with the teachers during the lecture. The class size in the lecture varies from 14 to 64, and for practical work it varies from 7 to 16. In the lower secondary teacher training schools also the situation is the same. Here also, teaching predominantly consists of the use of lecture method. Rarely, demonstrations are used for explaining some principles in the science studies. In the absence of laboratories/workshops do not carry out practical exercises or experiments. Teachers do not make use of audio-visual aids during teaching except for charts and models on some occasions. The class size varies from 10 to 52.

In the upper secondary teacher training institutes also most of the teachers employ the lecture method in teaching. A few of the teachers sometimes use demonstration technique for elaborating concepts and principles in the science studies. A few teachers also make use of audio visual aids such as charts and models. Teachers resort to dictation of notes. The class size is 50 to 55 at Savannakhet and Dongdok. The interaction of studies with the teacher trainers in the lecture classes is almost absent. For the laboratory classes the size of the class varies from 12 to 30. Students perform experiments in group of 3 to 4. Instructional sheets provided by UNESCO are being used in performing experiments in Natural Sciences.

Teaching practice at all levels of teacher training consists of two weeks of lesson planning and simulated teaching. During this period, the teacher trainee receives feed back from the supervisor as

well as his/her colleagues. This is followed by a macro-teaching of six weeks in the actual schools. The supervisor is present at the time of practice teaching and offers feed back to the teacher trainee on this/her performance.

Books and other support materials written in Lao are neither available with teachers nor with students for any of the teacher training programs. Some of the teachers, however, make use of books written in French, because most of the curriculum content match with the content covered in these books, especially in the area of natural sciences. Most of the books being used by the teachers at present lack elaborate explanation of the concepts and principles. Secondary, the available books do not contain the recent information on the subjects and lack detailed coverage of the content. Students do not have books on any of the subjects prescribed in the curriculum. They depend entirely on the notes taken by them in the class or dictated by the teacher.

Teacher Trainers

The average student teacher trainer ratio in pre-school, primary, lower secondary and upper secondary teacher training schools/institutes in the year 1991-92 was 5.39, 7.60, 7.84 and 9.30, respectively. These average figures, however, do not portray the extreme student/teacher ratio in the schools which could be as low as 2 (in some minority schools) or as high as 15.

The number of teaching hours engaged in by the teacher trainers varied from 10 to 20 in the case of pre school teacher training schools, 4 to 22 in the case of lower secondary teacher training school and 4 to 16 in the case of upper secondary teacher training institutes.

Information about the qualification and experience of teacher trainers is not available at the national level. Data about the qualifications and experience of teacher trainers was collected from a sample of schools.

In-Service Training

A large number of teachers working in the Pre-school Primary, Lower Secondary and Upper Secondary schools are untrained and unqualified.

In addition to the large number of unqualified teachers working at the different levels of education, the qualified teachers have hardly any facilities for upgrading and updating their knowledge, except for those in the upper secondary school who are provided with in-service training at the IUP, Dongdok.

Most of the staff of secondary teacher training schools, for example, are trained secondary teachers who have been promoted to teacher training schools without any additional training. There are absolutely no facilities that exist for the training of teacher trainers except that provincial education committees sometimes organise vacation seminars for primary teacher training staff and staff at one level of teacher training may receive training at an institution of the next level. IUP Dongkok has organised a number of short course under the UNESCO project to train teachers of upper secondary teachers in science teaching.

The number of participants who received training in the two years was 365. At this rate, it would take about 6 years to cover all the teachers teaching science subjects in the upper secondary schools. The cycle could be much longer. There is a need to reduce the period of this cycle. This would

mean increasing the capacity of the Institute to offer short courses in this area. Apart from this, the institute does not offer-in-service training program in any other area.

There is no planned effort at the other teacher training institutes to organise upgrading and updating courses of long and short duration for improving the qualifications or updating the knowledge and skills of teachers- in-service.

The range of opportunities for professional development and upgrading of teachers working at different levels of education are thus very limited.

The school for training educational administrators at Vientiane offers two programs every year for the training of educational administrators such as Heads of departments of MOE, Heads of PES and DES, and Heads of schools all levels. It has so far offered 12 programs of varying duration of 3 weeks to 4 months. The 4 month course covers areas such as administration, planing statistics, school mapping, theory of policy making, population education, pedagogy and psychology. The short courses of three weeks duration offered at the provincial headquarters of Luang Prabang, Vientiane and Champasak were conducted with the assistance of UNESCO and included topics on the role of administration, planning, diagnostics, the objectives of education, projection of student-numbers, teacher-numbers, and needs for materials and costing, school mapping and construction, organisation and collection of statistics and evaluation. The Institute has so far trained 1,006 administrators from education and other Ministries through the courses offered by it.

Issues in Teacher Education

A number of sectoral and institutional issues relating to teacher education and instructional material development and distribution have been identified as follow:

Standardisation of Teacher Education Curriculum

Over the past 15 years the Government has developed the administration of education to PES and DES. As a result MOE has been unable to maintain national standards for TTC either for academic curriculum, which vary from one TTC to another, or the equipment and building, which have deteriorated. Since a national teachers education curriculum has not been developed and the TTC have limited access to few, if any reference books in the Lao language, the teacher trainers tend to rely on the lecture method, given the lack of instructional materials.

Number of Teacher Training Colleges

At present there are TTCs which prepare teachers for pre-schools and primary schools, and for lower secondary and upper secondary schools and some which combine the training for primary and lower secondary school teachers. There are TTCs, for Arts, vocational and sports teachers. All of the TTCs vary widely in the quality of the programs and facilities. The present number of the TTCs exceeds the Government's capacity to provide adequately trained staff and sufficient funds for their maintenance. In some sparsely populated areas there are not enough teacher trainees to justify the existence of the local TTC. A reduction in the number of TTCs is required, and is being reviewed by the Government.

Admission Procedures

Although a system exists for regulating admission to TTCs through the allocation of a quota to each province, the operation of this system is unsatisfactory. When there is a shortage of candidates from one province, the spare places are offered to surplus applicants from other provinces, on the understanding that the applicants will teach in the province under whose quota they have been selected. However, there is not means of enforcing this arrangement and many graduates fail to take up the positions where they have been assigned.

In-Service Training for Teacher and Teacher Trainers

Teacher training has not kept pace with the rapid growth in enrolment which occurred since the present system of government was established in 1975. The result has been that in 1987-1993, 35 per cent of the primary school teachers (7,259), 14 per cent of lower secondary school teachers (965), and 17 per cent of upper secondary school teachers(361) were either untrained or insufficiently qualified to teach at their respective levels. Although some provincial authorities have attempted to rectify this situation with short training programs there is not general system for untrained teachers to obtain qualifications; nor is there a system of in-service training to upgrade the skills of unqualified teachers.

Instructional Materials

Facilities for printing and for distribution of instructional materials, primarily textbooks, have been provided by various aid organisations and the Government. However, the development of textbooks and their distribution have been inadequate. The Educational Printing Enterprise (EPE), a state-owned enterprise, can undertake reasonably large print runs, but does not have the capability to distribute the books throughout the country.

Need for Research in Education

Very little research in education has been undertaken in the country, yet there are pressing issues that need to be investigated to provide the Government with information on which to base educational policy. Two possible research issues are the future role of private school and of NGOs in education. The Government aims to move to wards universal primary education, but this will take time to achieve, and there is a need for action research to develop programs to increase participation in schooling. Further attention to the quality of teaching is required, and it is therefore suggested that programs for upgrading untrained teachers and for developing teacher training programs for ethnic minorities and for women should be investigated. The Government also plans to investigate the feasibility of cost recovery programs for education. The development of women administrators and teacher trainers needs to be studied to ensure the full participation of women. These research studies will enable a number of Lao nationals to gain experience in research methodology.

Conditions of Employment

Teachers face considerable hardships in the fields including irregularly paid low salaries, isolated locations and lack of professional development programs. Many teachers have second or even third jobs, while those in rural locations have to farm to produce enough food for their families. Approximately 10 per cent of the teachers resign each year.

The salary structure for civil servants, including teachers, was reviewed in 1990, which resulted in substantial increases in the basic salary particularly for the supervisory categories. Teachers are paid about 10 per cent higher than civil servants with similar qualifications. Recently, a system of provincial treasuries was developed to ensure the prompt payment of civil servants on a regular basis but is still not fully implemented.

Trends

Although the number of children attending school and of teachers employed have increased greatly since 1975, considerable further expansion of the education system will be required before the Government's aim of universal primary education is achieved. Moreover, the expansion has not been accompanied by improvements in the quality of schooling or of teacher training. The Government has given increased priority to education in the budgetary allocations in the Public Investment Program. (1991-1995), but requires more financial resources and qualified staff to carry out the required modifications. Moreover the administration of the education system needs to be strengthened and co-ordinated.

The Government's plan for sustained economic growth is dependent on an educated population, which in turn requires a higher quality education system and a reduction in the inequities in education in the various regions. The first step will be the strengthening of primary and lower secondary schooling, together with improvements in teacher training programs and in-service courses for teachers and teacher trainers Concurrently programs for improving instructional materials for the new curricula and upgrading building will be needed.

Development Work (D.W)

The objective of the development work is to improve the quality of primary and lower secondary education in the country.

The development work will address key issues in : teacher education and instructional materials development, two interrelated areas that have a direct effect on increasing the internal efficiency of the education system. In teacher education, the development work will be designed to address the seven issues identified earlier. The serious shortage of instructional materials has a detrimental effect on the quality of education. The development work seeks to address this issue by providing textbooks to primary and lower secondary schools and to TTCs.

The development work will have two main components: the development of the teacher education system and the production and distribution of instructional material for primary and lower secondary schools and TTCs.

Reforms in Teacher Training

The first subcomponent of this part of the D-W will reform the system of teacher education in the following areas: (i) policy development through the National Teacher Education advisory Board (NTEAB) to be set up by the Government, and (ii) curriculum and training reforms through the Teacher Development Centre (TDC) to be established at IUP. The TDC will be headed by a senior education at the Vice Rector level and will comprise four units for : curriculum development (CDU), instructional materials development (IMDU), in-service training (ISTU), and resource development (HRDU). The CDU and IMDU will provide assistance in the development of a standardised teacher

education curriculum and appropriate instructional materials.

An important change to be made in the structure of teacher training is that students entering TTCs to become primary school teachers will be required to have completed either 8 years of schooling, in which case their program will be for three years, or eleven years of schooling, in which case they will study for one year. Entry to the program for lower secondary school teaching will require completion of eleven years of schooling and the teacher education course will be to for three years. The curricula for all TTCs will be revised and strengthened and all teacher training programs will have three components.

(i) professional studies in education and such related fields as sociology, psychology and child development;

(ii) discipline studies relating to the content of the subjects that the students will be required to teach; and

(iii) school studies involving school visits, classroom observation and practice teaching.

Upgrading of Physical Facilities

The upgrading and/or provision of new physical facilities at ten selected TTCs (the combined primary and lower TTCs at Luang Prabang, Savannakhet Champassak, Xieng Khouang and Ban Kheun and the primary TTCs at Vientiane Prefecture, Luang Namtha, Sayaboury, Saravane and Phongsaly) and at IUP will be the second subcomponent. New buildings will be constructed and others upgraded. Equipment, furniture, library books, instructional materials and teachers guides will be provides including financing for repairs and maintenance costs.

In-service Training - Teaching

A system of in-service education will be instituted. The D-W will be linked to the department of General Education. An in-service program for teacher trainers will be organized at TDC by ISTU. Selected teacher trainers will be provided fellowships to study abroad. The Government has indicated a preference for the fellowships to be in neighbouring countries to facilitate communication.

In-service Training - Teacher Training College Staff

Teaching in all the TTCs will be strengthened by the fourth subcomponent that will establish a system of in-service education for teaching staff, administrators, librarians and laboratory assistants. This will assist the staff to implement the revised curriculum to be developed for the TTCs.

The fellowships for three-months will be offered to the teaching staff and laboratory assistants at TDC. A librarian from each TTC will attend a one-month course by the library staff at IUP. An in-service course of one month in educational administration will be provided at TDC for the director and vice-director of each upgraded TTC, with a follow-up course of one month in the following year the courses in human resource development will be given.

The teaching at IUP will be strengthened, short-term fellowships and by providing books and teaching materials. Selected teaching staff of IUP will be sent for short periods to appropriate centres in Asia to study their subject areas and will take part in the curriculum development work at TDC. It is planned to upgrade the library by providing more education and subject matter books.

Advice on suitable books for translation will be sought. Two librarians will be sent to an appropriate regional university to study librarianship.

Foreign fellowships and local training programs will be offered to the staff of the TTCs, personnel of MOE, provincial education authorities and heads of schools. The human resource development consultants at the TDC will train selected MOE personnel in policy and planning, financial management and staff development. Provincial and district administrators and primary and lower secondary school principals will be given short courses in educational administration at selected TTCs.

The ten TTCs will prepare prospective teachers and will conduct in-service courses for the present teachers. The academic staff will be trained at IUP. Standardised curricula, together with appropriate instructional materials, will be devised for their pre-service courses upon the advice of the staff at TDC. In-service programs to assist staff implement the curricula will be offered at TDC and some foreign fellowships will be provided.

Teacher Development Center

An important subcomponent of the teacher education system will be the TDC to be established at IUP. Staff of the TDC, assisted by follows from the TTCs will develop the curricula to be used for training primary and secondary school teachers. This will be done in the CDU, which will also develop curricula for in-service courses for teachers. The IMDU, similarly staffed by a small group of permanent members assisted by fellows, will design instructional materials for the new curricula. The ISTU, staffed in the same manner, will develop in-service programs for teacher trainers and education administrators and advise on the delivery of the programs. In the longer term, it will also assist with in-service programs for teachers. The HRDU will assist with strengthening the administrators of education at all levels.

National Teacher Education Advisory Board

The NTEAB will advise MOES on the co-ordination of teacher education and the monitoring of policy implementation. It is important that the improvements made to be education system during the Project are sustained at the highest policy making level. In particular, NTEAB will consider policy areas such as the registration of teachers and the conditions of employment.

Malaysia

This paper presents (1) a short history of teacher education in Malaysia, (2) teacher education, (3) problems of teacher education, (4) research on teacher and teacher education, and (5) research on teacher and teacher education undertaken by the Educational Planning and Research Division, Ministry of Education.

A Short History of Teacher Education

Before Malaysia achieved its independence in 1957, there was a separate system of producing teachers for the Malay, Chinese, Tamil, and English medium schools. Teachers for Chinese and Tamil schools were directly trained in China and India, respectively. Teachers for the Malay schools were trained from among persons who had experience in teaching Quranic classes. The English medium schools drew their supply of teachers from Christian missionaries, who came with British rule.

In 1878 a Malay teacher training college was opened in Singapore, followed by two others in Melaka and Perak in 1900 and 1913, respectively. These colleges were founded specifically to train Malay teachers. To respond to the increased need for qualified teachers, teacher education programs were expanded with the establishment of two centralised colleges, the Sultan Idris Training College[1] in 1922 and the Malay Women Teachers' College in 1935. The first three colleges were closed with the opening of these two centralised colleges.

In 1870 the Woolley Committee was set up to study the problem of a shortage of teachers in English schools. Based on its recommendation, in 1905 a Normal Class teacher-training program was also set up in Kuala Lumpur to meet the requirement for trained teachers. In 1907 another Normal Class was established in Penang to provide training for the English medium school teachers. In this training program teachers attended weekend courses.

After World War II there was a drastic increase in the school going population. To supplement the local teacher education programs, specifically for secondary schools, the Kirby Teachers' Training College and the Brinsford Lodge Teachers' Training College were set up in England, in 1951 and 1955 respectively. These two teacher training colleges were deemed necessary because of difficulties in recruiting teachers who would be ready to come out from Britain to serve in this country for an extended period.

The first attempt at improving the quality of teacher education in Malaysia was initiated by the Barnes Committee in 1951. The committee recommended that all teachers, specifically those in the English medium schools, should undergo a two-year teacher training before their appointment as qualified teachers and that their entry qualification should be upgraded. This type of training had been recommended as a substitute for the previous three-year weekend and part-time training scheme.

The Razak Report of 1956 recommended the establishment of different types of institutions for the training of teachers for each level of schooling. This report recommended that the main goals of teacher education should be to have a common system of pre-service training for all primary school

[1] In 1997, the Sultan Idris Teacher Training College has been upgraded, and currently it is known as the Sultan Idris Teachers' University.

student teachers irrespective of the language they would use in their instruction and the minimum academic qualification for selection being successful completion of three years of secondary education, or Form Three. For secondary school teachers, the report recommended that the minimum entry qualification be successful completion of Form Five.

Based on the recommendations made in the Razak Report, two types of teacher training institutions were then established: the Day Training Centres for primary teachers and the Malayan Teachers' Colleges for the lower secondary school teachers. The universities would be responsible for training specialised teachers of the upper secondary and post secondary levels.

The abolition of the secondary entrance examination, which occurred with the introduction of automatic promotion to lower secondary school in 1964, created a dramatic increase in enrolment, which in turn increased the demand for teachers. A crash program was introduced in order to increase the number of secondary school teachers through part-time weekend training during term time at the Regional Training Centres (RTC), placed throughout the country. Trainee teachers at these centres took the same examinations as did the full-time students at the teachers training colleges and were awarded the same certificate.

In March 1971 the Ministry of Education set up its Committee to Study the Aims of Teacher Education in Malaysia. Recommendations made by this committee leaned more towards strengthening the quality of individual teachers and teacher education. This committee recommended that the aims of Malaysian education can be achieved only if teachers are equipped with certain qualities. It therefore recommended that certain criteria for teacher selection, teachers' personal development, teachers' attitudes and their personality are among the important elements that must be seriously considered, because they were taken to have significant impacts on achieving the general aims and objectives of education. The Committee to Study the Objectives of Teacher Education also recommended that teachers should possess thorough knowledge of the subject matter content they are to teach as well as knowledge of other related fields and the ability to transmit those kinds of knowledge following sound pedagogical principles.

Teacher Education

Preservice Teacher Education

In Malaysia, pre-service teacher education programs are chiefly conducted by the Teacher Education Division, the nine local universities and the thirty-one teacher training colleges. The increased intake of teacher trainees at these teachers' colleges and universities is necessary to respond to a increased student enrolment at all levels of schooling.

Primary and Lower Secondary Teacher Education

The Teacher Education Division, Ministry of Education, through thirty-one teacher training colleges, prepares teachers to serve in primary schools and lower secondary schools. In these teacher training colleges, the duration of training is two and a half years for academic teachers, comprising four semesters of course work and a final semester of practical attachment in school. For technical and vocational teachers the duration of training is three years, or six semesters, comprising four semesters for course work and a final two semesters for teaching practice in schools.

In the mid-1980s the Teacher Education Division raised the minimum academic qualification for

new student teacher intakes into teachers training colleges. In the selection process those who hold the Malaysian Higher Certificate of Education (MHSC) will be given priority to those who hold the Malaysian Certificate of Education (MCE). In 1995 another drastic reform had been introduced by this division by upgrading the teacher pre-service education program from certificate to diploma level with the length of three years duration of training.

The steps are taken consistent with the Malaysian government's policy of strengthening teacher education for non-graduate teachers. It is believed that increasing the formal education of teachers will increase their effectiveness and improve student learning performance. In addition, candidates' co-curricular activities are also considered to be an important criterion for teacher trainee selection.

Prior to their acceptance into teacher training colleges candidates for teacher trainees or student teachers must pass two important aptitude tests. The first test is a paper and pencil test, its main purposes being to assess candidates' scholastic abilities as well as to predict their future teaching performance and teaching creativity. Only those who achieve a minimum predetermined cut-off point in this written test will be called for the second test, interviews or oral examination.

The curriculum in teacher training colleges is designed specifically to train teachers for the primary and lower secondary levels. It consists of two components:

i. core or required subjects and

ii. school subject components.

The core subjects include Educational Psychology, Pedagogy, Education In Malaysia, Malaysian Language (Bahasa Malaysia), English Language, Educational Technology, Islamic Religious Education (for Muslim teacher trainees only), Islamic Civilisation, History Of Malaysian Education, and orientation to educational service procedures.

In the school subject component, a teacher trainee for the primary school has to take pedagogical courses in Mathematics, Man And His Environment, Moral Education, Physical Education, Music, and Arts. A trainee teacher for the lower secondary school has to take Moral Education, Physical Education, Health Education, and a course in the New Primary School Curriculum (NPSC). In addition to these two components, for self-enrichment programs, teacher trainees for primary schools are required to take a course in Home Economics, while a teacher trainees for lower secondary schools must take courses in Home Economics, Music and Art.

All teacher trainees in teacher training colleges are also required to engage in co-curricular activities as part of their training programs. Three types of co-curricular activities are as follows:

i. activities of uniformed teams or associations,

ii. clubs and societies, and

iii. sports and games.

It is compulsory for every teacher trainee to be involved in at least one activity for each of these three programs. The aim of the co-curricular activities is to equip them with expertise, skills, and competencies to implement co-curricular programs and activities at the school level. They are trained to be able to coach, organise, manage, lead, and officiate in school co-curricular programs.

The Post Graduate Teacher Education Program, also known as KPLI *(Kursus Perguruan Lepasan Ijazah)*, for the upper secondary level is also conducted at the teacher training colleges. In 1990 this program was being implemented at these colleges. This program has an objective to supplement the output of graduate teachers from local universities. It is in line with the Ministry of Education's policy of having only university graduate teachers in secondary schools in the near future.

Upper and Post-Secondary Teacher Education

Those wishing to teach in the upper secondary or post secondary levels must hold a bachelor's degree and a one-year post graduate diploma in education or a certificate in education. There are two types of pre-service teacher education programs provided by the university: a one-year diploma in education and a four-year integrated basic degree course. The diploma in education is a one-year post graduate course in education. The integrated basic degree course has teacher education integrated into the bachelor's degree program.

The teacher education curriculum offered by the local universities is generally similar in structure and scope to that offered by teacher education colleges. It consists of three main components: academic subjects, educational theory, and teaching practice. In the first component, the teacher trainees are required to gain knowledge in one or two school subjects that they plan to teach in schools, also known as the first and second subject options. At the university level, they take courses leading to a degree in science or humanities.

The theoretical component generally consists of foundation courses in education, namely: Philosophy of Education, History of Education, Sociology of Education, Educational Psychology, methods courses for the teaching of various school subjects, testing and measurement, educational technology, counselling and school management. Teacher trainees are also requested to undergo teaching practice in actual school settings which has a duration of twelve weeks.

Inservice Teacher Education

In the past two decades there has been a growing interest in inservice education and other staff development programs in Malaysia. The need for inservice training for teachers arises because it is strongly believed that pre-service education can only contribute to an initial and basic competence to start a career as trained teachers. The systematic and effective implementation of inservice programs and activities will, in turn, improve the quality of teachers' classroom performance.

In Malaysia in-service training programs for teachers are mainly conducted by the teacher training colleges, local universities, relevant Divisions in the Ministry of Education, the State Education Departments, District Education Offices, State Education Resource Centres, and Teacher Activities Centres. Four of the Ministry's divisions that are active in organising and implementing inservice training for teachers are the Teacher Education Division, the School Division, Curriculum Development Centre and the Institute Aminuddin Baki. In addition to programs organized locally, the Ministry of Education also sponsors teachers to attend special inservice training programs overseas.

The present in-service training for teachers and school administrators consists of four major types as follows:

i. enrichment programs, or programs to raise and update the level of expertise/skills and

knowledge of teachers,

ii. familiarisation programs, or programs to orient and update teachers' knowledge and competencies related to the implementation of the new curricula or new roles and practices, and

iii. implementation of large scale innovations in teaching and learning process and education management at all levels.

iv. specialisation programs to train teachers in special education, guidance and counselling, health and physical education, educational technology, and other special educational programs and activities.

The aims of inservice training and other professional development activities for the Malaysian teachers and school administrators programs are:

i. To upgrade teachers' academic and professional knowledge as well as to widen their experience in various subject disciplines;

ii. To orient teachers towards new developments in teaching methods and techniques - that is to update teachers' teaching or instructional skills;

iii. To introduce teachers to new curriculum and new subject matter;

iv. To enhance teachers' commitment towards educational activities both in school and outside school;

v. To motivate tenured teachers; and

vi. To serve untrained teachers with basic teacher training courses, conducted during school term holidays.

Generally, new teaching approaches and techniques, preparation of instructional materials, and preparation of teaching modules are the most emphasised aspects of inservice training for Malaysian teachers. Other components are teaching of new subject matter, career guidance, and library management. In addition, the use and care of audio-visual teaching aids to enhance teachers' knowledge and skills in educational technology is also becoming an important component of inservice training activities for teachers.

Problems of Teacher Education in Malaysia

Four major problems are facing teacher training in Malaysia, namely: (1) new emerging classroom practices and problems; (2) lack of relevant research on teacher education: (3) the declining status of teachers, (4) lack of co-ordination in in-service training implementation, and (5) imbalance between school reforms and reforms in teacher education.

As to the first problem, it is commonly known that the nature and content of curriculum in the pre-service teacher education program at both the teacher training colleges and the universities are organized especially to prepare teacher trainees with sufficient knowledge of subject-matter content they plan to teach. Teacher trainees are also equipped with some instructional skills. However, teachers in today's classrooms have to encounter an array of difficulties related to various problems

and issues due to a lack of specific pre-service training in analysis, synthesis, and application of principles and theories in solving new emerging classroom practices and problems, particularly are related to advanced technologies and discipline problems among today's school children.

There is also a common belief that after trained teachers have gone through and graduated from teacher training colleges or universities they are already qualified teachers and that there is no need for any continuous self and professional development in order for them to stay proficient and innovative in the education system. Even worse, many people currently teaching also display some apathy toward inservice training and other staff development programs.

With regard to the second problem, although research on education is recognised to be one of critical areas in educational research, it can be stressed that the kinds of studies needed by teacher education are still far from sufficient, particularly those related to the actual teaching-learning context of Malaysian students and teachers. Studies so far available tend to be quite isolated and discrete, distributed over widely different subject areas, and do not provide comprehensive guidelines to educators for developing teacher education programs that are suitable for teacher trainees who come from various social backgrounds.

With regard to the third problem, the declining status of teachers has resulted in the declining interest to become teachers. For many people especially among male university graduates teaching is the last choice of career or profession today. This occurs because teaching is considered to be a "half-day job" and is also frequently viewed as an occupation and not as a profession or career. They often believe that school teachers have no influence in their work places. They have to prepare weekly and daily lesson plans to be checked by school principals, have to strictly follow curriculum guides in their teaching, and even worse they are often treated like school children by school administrators. Also, many bright graduates believe that by becoming teachers there is no sufficient room available for their career advancement.

Furthermore, many teachers who are assigned to teach important subjects - particularly the National Language (Malay Language), the English Language, Mandarin Science, and Geography are not trained to teach in those subject areas.

With regard to the inservice training and other staff development programs for teachers, some of them are carried out without proper and systematic planning. Programs are organised without sufficient needs assessments, and it is suspected that for some of these programs there is a tendency towards addressing off-target problems. In many cases, they are also carried out with lack of coordination among responsible divisions and agencies, especially when refers to the course contents and the selection of teachers to attend the training.

In Sabah and Sarawak a significant number of untrained teachers are employed to teach in many remote and isolated schools. A majority of them are local residents and well-versed with local cultures and dialects. Generally, some of these teachers have less, or even worse, no opportunity at all to attend any inservice training programs organized by the various divisions of the Ministry of Education and other agencies.

Ideally, school reforms and reforms in teacher education must be planned and implemented in a more co-ordinated manner. Unfortunately, it is commonly known that both structural and curricular changes in teacher education programs conducted in thirty-one teacher training colleges are more smoothly planned and implemented than those are conducted in all local universities. This problem

arises due to the fact that all teacher training colleges are directly controlled by the Teacher Education Division whereas all universities have their own autonomy in formulating and implementing their own curriculum. Thus, in many cases, changes and reforms in teacher education programs in some universities took place at a slower rate than they should be.

Research On Teacher And Teacher Education In Malaysia

Research on teacher and teacher education is recognised by the Ministry of Education to be one of the important areas of Ministry's research activities. Research on teacher education is mainly carried out by the Educational Planning and Research Division, Teacher Education Division, Curriculum Development Centre, local universities, teacher training colleges, individual researchers and other local and foreign public and private agencies.

Research that are carried out by the individual researchers, consists mainly short term projects using cross-sectional design and its direction is more towards situation-interpretive purposes. Generally, research on teacher and teacher education conducted by individual researchers has one or more of the following characteristics:

i. Research focus is narrow and mostly are basic in nature with very little contributions to and no immediate impact on educational planning and decision making process.

ii. Although there are elements of improvement in classroom and other educational practices, its degree of generalisability is very limited.

iii. Students conduct research as a partial requirement of their diploma, bachelor, master, or doctoral programs and the main objective is more towards academic exercises and they do not hold any importance for administrative purposes.

iv. University lecturers and researchers do their research to gain scholarly recognition.

v. Most of the research work is not published and very difficult to locate.

Research work on teacher education that are carried out by the Educational Planning and Research Division and other divisions in the Ministry of Education and some by the local universities are mainly empirical-analytical and policy-oriented or decision-oriented type of research using a big number of samples. Findings of this research are primarily utilised as a soft-tool to facilitate planning and policy making process.

Empirical-analytical research on teacher education is considered new. Its impact on the administrative decisions – particularly in changing direction in teacher education – can not be exactly measured when compare to other major areas of educational research that are carried out by the various divisions and agencies in the Ministry of Education and local higher learning institutions.

The funding of educational research - and teacher education - comes from various sources, among others, are as follows:

i. The Ministry of Education and its agencies

ii. Other ministries and public agencies such as the Ministry of Science and Technology, Ministry of Youth and Sports, and the Prime Minister's Department.

iii. Private sector, that is, mostly for commissioned research.

iv. International agencies, such as World Bank and UNICEF.

v. Individual contributors.

The Ministry of Education channels research funds to all relevant divisions and agencies and local universities through their annual budget allocations. In addition, research applications can be made by those divisions and local universities by submitting research proposals to the Ministry's Educational Research Advisory and Co-ordinating Committee (MEERAC). The MEERAC presents research themes and/or which are critical to the Ministry's policies. Those divisions and universities which are awarded these special grants have to negotiate and sign their contracts.

Research on teacher and teacher education in the last fifteen years that are available at the Ministry of Education's Documentation Centre can be clustered under the following major themes:

i. teachers in pre-service education programs;

ii. teachers in inservice education and other personal and processional programs and activities;

iii. teacher socialisation, welfare and needs;

iv. functions and responsibilities of teachers;

v. teachers and teaching and learning process; and

vi. teachers' practical knowledge and professional-interpersonal teaching skills.

One interesting point that needs to be highlighted here is that a new interest in research on teacher and teacher education has also rapidly increased at school level. Research methodologies, particularly action research, become an important topic in inservice training for teachers.

At the same time, almost all teacher training colleges allocate special slots in their official time table to teach research methodologies to teacher trainees. Primer colleges such as Language Institute in Kuala Lumpur, Raja Melewar Teachers Training College in Seremban, Darul Aman Teaching Institute and Kota Bharu Teachers Training College in Kelantan have established their Research Departments with the main objective to enhance their research and development (R&D) activities.

Research On Teacher And Teacher Education Undertaken By The Educational Planning And Research Division, Ministry of Education

Based on the small number of research conducted in this area, a conclusion that can be made is that the Educational Planning and Research Division has given low priority to research work on teacher and teacher education. Since 1981 there are only thirteen major research projects that are relevant to this particular area being undertaken by this division.

Research that carried out by the Educational Planning and Research Division can be grouped into these four following themes:

i. inservice training for teachers;

ii. teaching and learning process in classroom;

iii. teachers' workload; and

iv. curriculum implementation.

With regard to the first theme, studies are mainly focused on four specific aspects: (1) inservice needs for primary and secondary teachers; (2) inservice programs and their relevance to the teachers' actual professional needs; (3) the effectiveness of inservice training programs; and (4) educational technologies and inservice training activities for teachers. In the second theme, research work is focused mainly on the major instructional aspects that are directly related to teachers' daily work, both in the classroom and outside classroom.

Research on teachers' workload had been conducted primarily based on these following objectives: (1) to identify teachers' workload in academic and non-academic areas; (2) to identify school administrators' workload; (3) to examine changes in teacher and educational administrator's functions and responsibilities at school level.

With regard to the fourth theme, the main goal is to evaluate the effectiveness of curriculum implementation at all school levels, with special focus on both the Integrated Curriculum for Primary School and the Integrated Curriculum for Secondary School that are currently implemented in all public primary and secondary schools.

Concluding Observation

All problems that have emerged in teacher education program can be regarded as temporary phenomena. Currently, the Ministry of Education has planned and implemented various systematic and informed strategies and approaches to solve those particular problems effectively and continuously. One of the relevant strategies is the establishment of Planning Unit in the Teacher Education Division.

With regard to the roles of educational research, it seems that there is an increasing trend in the amount of conducted research on teacher and teacher education. A broad base can be built for future research in this area. Current development in the Ministry, particularly with the emphasis on the usage of information technologies in education at all levels, clearly provides an optimistic picture of future research on this important area.

Furthermore, every year more teachers and educational administrators at all levels are selected and trained to be competent in carrying out research at their work places. The amount of the research fund also increases steadily. Research work becomes a more collaborative effort among major divisions in the Ministry of Education. Most importantly, educational planners and decision makers are now becoming more aware about the roles and importance of research as part of planning and decision making process.

New Zealand

THE SITUATION OF TEACHERS AND TEACHER EDUCATION IN NEW ZEALAND: PROBLEMS, ISSUES AND TRENDS

Introduction

Teacher education in New Zealand for school and early childhood teachers has undergone major change during the past 10 years. In keeping with the wider reforms, most decisions have been devolved from central administrators to tertiary institutions. Moreover, provision of training has been opened to competition. Courses have been reviewed, methods of student assessment and teacher accountability have become more rigorous, and the programmes leading to pre-service qualifications have been made more relevant to the general goal of producing more effective teachers. The changes have raised issues and created challenges. This paper describes the changes, discusses the issues raised and suggests research which is necessary in order to judge the effectiveness of the developments.

The Context

New Zealand has a population of 3.6 million people. Around 685,000 of this total attend schools: 445,000 at primary level, 234,000 at secondary and another 6,000 in special education schools or classes. A further 160,000 children receive some form of early childhood education. There are 2,797 schools and 3,824 early childhood centres (Ministry of Education 1996). Teachers who can deliver quality teaching to each level of education are needed.

Significant changes in teacher education stemmed from two major reforms in the administration of education, published as policy in *Tomorrow's Schools* (1988) and *Learning for Life* (1990). They have resulted in institutions providing teacher education becoming self-governing through their Councils. Decisions about the employment of tutors and their qualifications and training, the structure of courses and the selection of students are the responsibility of each Council. The Government provides bulk funding to colleges of education and universities, based on a centrally-determined number of Equivalent Full Time Students (EFTS). The bulk funding covers most of the cost of the training, and nowadays students pay the balance via course fees. This is a change from student allowances to tertiary student grants - it signifies teacher training is regarded as something to be bought. There is no guarantee of later employment in schools for student Teachers once they graduate.

McQueen (1996) describes these changes as "a balance of powers - at all levels - a three way partnership between the clients (students, parents, community, industry), self-managing institutions and Government (the major funder)".

A similar institutional model pertains to schools. Schools have become self-managing through their Boards of Trustees, who are responsible for the employment of teachers and for maintaining administrative and educational standards in the school. Early childhood centres have always been community based or private institutions (except for the state Correspondence School) employing their own teachers. All educational institutions are answerable to the Ministry of Education as the major funder and regulations setter. The Education Review Office monitors their compliance with legislation and regulations, and is an arbiter of standards. Teachers are also answerable to parents and local communities. At all times they can be seen as the central point in a network of players on the educational stage (refer Figure 1).

Other changes have occurred recently in teacher training. Early childhood training was the first to feel the effects of more institutions being accredited to provide pre-service and in-service training. This year, the door has opened for more institutions to offer courses for school teachers. They have been allocated EFTS-based funding, and the number of training providers has risen dramatically in 1997. There was also a significant increase in the number of EFTS, from 6,612 in 1996 to 8,348 in 1997 (279 of which were not taken up as at the 8 April). Little is known about any flow-on effects on teacher education course content.

An increase in institutions being accredited to provide teacher education follows a trend towards introducing contestability into health and education services. Greater competition is intended to improve services in the state sector.

The increase in student places is part of the Government's response to a serious shortage of teachers identified in 1996. A number of reasons are suggested for the shortage:

> Fewer applicants for places, possibly due to low salary structures; competition from other, more apparently attractive occupations; and the need for trainees to pay fees for courses.
>
> A decrease in teacher morale because of increasing complexities of society, as well as the demands of implementing revised curricula and assessment policies.
>
> Reluctance to move to areas of need such as remote rural areas.
>
> An aging teaching force.

Another response to the shortage has been the recruitment of teachers from overseas.

Other measures include providing shortened graduate courses, retraining former teachers, paying a special allowance to teachers willing to work in areas of shortage, and recruiting untrained or partly trained people from local communities. All have implications for teacher education.

Earlier this year, the Government announced a Review of Teacher Education. The review is in response to concerns raised by several groups about teacher education:

> "including entry requirements, the content of training, the extent of the practical element in training, and quality assurance mechanisms. [The review will also consider] the most efficient and effective options for delivering a reliable supply of high quality teachers and a flexible and adaptable teaching service which meets the needs of students" (Ministry of Education, 1997).

Many of the changes in teacher education are planned for longer-term strategic reasons. Greater use of technology calls for schools that produce students who can readily adapt to rapid change. Teachers need to relate learning to a world-wide context, in terms of more overseas students, and so students can translate skills acquired in New Zealand into a job, say in the Philippines. Such demands have implications for programme design and content for pre-service and in-service teacher education. The changes also call for research and evaluation to investigate whether the desired goals are being reached.

What is the Goal? Maintaining the balance between theoreticians and grounded practitioners

Many prospectuses state that New Zealand institutions aim towards teaching as a graduate profession. Until recently the most common teaching qualification was a 3 year Diploma of Teaching. Most tertiary providers complement this programme with a first degree (sometimes by a conjoint arrangement with a nearby university).

Currently, there is a great deal of discussion about course components and practicums, and their relative weight. Academic studies are seen as only one of the requirements for a competent teacher. Teachers must also have a range of technical and personal skills in order to be able to create an environment where all students can learn at their optimum capacity. Skills or competencies are a focus of the discussions, as those with an interest in teacher education attempt to define them for the purposes of designing teacher education curricula and assessment of units.

It is recognised that pre-service teacher education is only the beginning of a process of professional development. Competencies identified as necessary for beginning teachers must be added to during their careers as new skills are required. Management of a classroom, for example, calls for different skills and understanding from management of a department or a whole school. Pre-service education, however, must ensure that the beginning teacher is equipped with the flexibility to adapt initial skills to wider contexts.

It is also generally agreed that student teachers must acquire a basic core of concepts which have wide applicability. As well, they must be able to reason, question and challenge, so that they can be open-minded, thoughtful, and resourceful in any setting. Schulman (1987), quoted in Fitzsimons and Fenwick (1997), lists seven minimum categories of knowledge considered necessary for teachers to have in order that students can learn:

- Content knowledge;
- General pedagogical knowledge, including principles and strategies of classroom management;
- Curriculum knowledge;
- Pedagogical content knowledge, a mixture of the first two categories which forms teachers' special professional understandings;
- Knowledge of learners and their characteristics;
- Knowledge of educational contexts;
- Knowledge of educational ends, purposes and values, and their philosophical and historical grounds.

Theory and practice is bridged by student teachers undertaking practicums. These comprise time, usually about 3 months per year, spent in schools with either an associate teacher or a teacher practice team. So called "Normal Schools" are specifically designated in the cities where colleges of education are located, and are appropriately staffed and resourced to cope with many primary teacher trainees. Secondary, early childhood and primary student teachers also do practicums at regular schools and early childhood centres.

Attempts are made to support the students undertaking practicums through a close liaison between the

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staff, and the schools and centres providing practicums. They include tutors spending time in the schools and centres during placements, and seminars and meetings for associate teachers, booklets and manuals for student teachers and associate teachers to ensure that common expectations are understood, and mentors (in the case of one provider).

An issue arising from the requirement to do practicums is the pressure on student teachers who need to meet university course requirements at the same time. The pressure to meet the needs of the practicum may result in university studies being neglected or even abandoned.

Who Provides the Training? The Proliferation of Providers

Prior to 1989 there were six providers of primary and secondary teacher education, five colleges of education and one university with a School of Education. Early childhood training for teachers in kindergartens and childcare centres was also focused in these institutions (although other services - such as playcentres - provided their own field-based courses). Now there are 16 directly-funded providers of school teacher training and another 10 stakeholders who act as bases for programmes developed by the main institutions. These 26 providers operate currently from 28 places of provision. The places of provision include most of New Zealand's urban centres and also some small rural towns which lack easy access to locations with university, college of education, or polytechnic providers. The providers of teacher education in mid 1997 are:

4 colleges of education;

5 polytechnics/institutes of technology;

3 private training establishments;

1 whare wananga, a Maori institution providing training for Maori immersion teaching;

3 universities providing independent teacher education (2 as a result of mergers with former colleges of education).

The other stakeholders are:

4 universities providing Bachelor of Education (BEd) degrees in a conjoint arrangement with their local colleges of education;

3 polytechnics, one university and one secondary school delivering programmes on behalf of other polytechnics;

another Maori learning centre operating on behalf of the whare wananga.

There are some positive and some negative aspects to this expansion. An analysis of the 1997 intake (Ramsay 1997) shows that training is now available to people who may have previously been teachers with limited or no qualifications. He found that the newer providers have attracted "older students than is generally the case for existing providers"; also that there are many more Maori, both numerically and proportionately, engaging in teacher education than was the case a decade ago. A variety of means of delivery of the programmes has been developed to cater for needs arising from remoteness or from unqualified teachers already in schools.

Providers of early childhood teacher education are even more numerous (over 30 providers), and with

diverse programmes and institutional models.

It has also been suggested that the free market model encourages providers to make their programmes more relevant and attractive. The latter point, however, can also be seen as a negative. In order to attract applicants, providers have been tempted to seek Government approval for shortened programmes, a strong incentive to fee-paying students. This year that Government approval has been given on the basis that providers have met quality assurance standards formerly met by approved providers of 4-year programmes.

Another issue is supply and demand. In some locations, providers are flooding of market. This can be problematic in smaller cities with few schools to provide practicums and limited jobs for graduates. For example, Rotorua, a city of about 54,000 people, has four training providers focusing on school teachers, one managed from the South Island. In other locations, there is an undersupply even where there are teacher shortages.

A serious issue raised by the proliferation is quality assurance. Most prospective employers (individual schools or centres) have little idea of the quality of the prospective teachers graduating with qualifications from new providers, although all new providers have had their initial courses approved by the New Zealand Qualifications Authority (NZQA) (a body which was set up by the Government to establish a framework of unit standards and qualifications). On-going monitoring has not been a feature of NZQA systems to date. The strength of the concerns about new providers of early childhood teacher education is borne out by the Teacher Registration Board declining to register graduates from their programmes until the new providers meet approval and accreditation requirements. It could mean that if standards are not met, these graduates may be hoist with provisional registration permanently. (It is usually only for the first 2 years for beginning teachers.)

The qualifications framework has been likened to a set of building blocks which can be assembled to form a complete pattern. A feature of it is students transferring from one provider, or even one qualification, to another can take relevant units with them. While a 'patchwork' programme may appear to fulfil the requirements for the qualification, it is very difficult to monitor the development of the competency of the student teacher through to the end.

What Do They Do? Towards a Coherent Training Curriculum

Under-scoring the belief that teaching should be a graduate profession is the provision of a Bachelor of Education course by most providers of primary teachers' education. The degree work is done at the same time as the other parts of the training curriculum. Not all students complete a degree during their training, and it is not a pre-requisite for teaching. Those who pass the 3 year course get a Diploma in Teaching (Primary) or (Early Childhood Education), and provisional registration which is confirmed after 2 years satisfactory teaching. A fourth year is generally needed to pass a degree as well.

It is intended by NZQA that the provider-specific programmes should comprise 20 unit standards. The unit standards are being developed by a Teacher Advisory Group (TEAG), representing most stakeholder groups, and include eight progressive levels of achieved objectives, or student-centred learning outcomes. The unit standards form part of wider courses which, according to Ramsay (1997), are similar in balance and content across most of the providers. The courses are:

The teaching process (including Professional Studies in the practicum);

Curriculum studies - covers the seven essential areas of learning in the New Zealand Curriculum up till Year 10:

language and languages (including Maori)
mathematics
social sciences
science
the arts (including art and music)
health and physical well-being (including physical education)
technology;

Education studies - covers courses on human development, the philosophy of education, and issues of race, gender and class within a sociological context;

Liberal or general studies - covers a wide variety of topics from which students choose.

Training programmes usually cater for specialisation in areas such as education of children with disabilities, bilingual education, music, art or physical education. All programmes can, theoretically, be shortened to recognise prior learning, or to allow a transfer of relevant qualifications or skills previously gained.

Most secondary student teachers have completed one or more degrees before undertaking specific teacher education courses. They do a one-year programme offered by one of 12 providers: the five colleges of education, two universities, three polytechnics, and two private establishments. Four of these providers also provide a 4 year course for secondary teacher trainees. Most of the secondary programmes cover the four basic courses provided in primary teacher education programmes, along with courses in the student's specialised subject areas.

Some secondary school teachers enter the profession with either partly-completed or no teaching qualifications. Such teachers are usually those with specialist subject qualifications, e.g., music, sport, or fluency in the Maori language. They, like unqualified primary teachers, are usually found in areas of teacher shortage. They need a Limited Authority to Teach (LAT) from the Teacher Registration Board. Any person who has skills and experiences appropriate to the school who can advance the learning of students in particular areas, but does not have normal teacher qualifications, can be granted a LAT. They do still need to meet certain criteria. The primary and early childhood teachers' union (NZEI, Te Riu Roa) recently stated that "an analysis of 350 LATs showed that 30% had no qualifications, some had skills only in coaching sports and others had no relevant skills and experience". (*Evening Post*, 28/5/97)

Is Teacher Education Doing What it Says in Terms of Quality? Promises versus Practice.

New Zealand attempts to give quality assurance in a number of ways. All tertiary institutions are required to have charters, with goals, objectives, policies, and expected outcomes. The charters must be approved by the Ministry of Education before the institutions can receive funding. The providers must be accredited and courses approved by NZQA, but as stated earlier NZQA has not had an ongoing monitoring role, (see Figure 2).

Hitchiner (1997) found that there is no commonly-accepted set of minimum standards for overall programmes. Instead, each type of provider has its own moderation body operating within the policies and practices established by the NZQA. Briefly, they are:

Universities - the Vice-Chancellors' Committee, through the Committee on University Academic Programmes (CUAP);

Polytechnics - the Association of Polytechnics in New Zealand, through the N.Z. Polytechnics' Programme Committee (NZPPC);

Colleges of Education and other members - the New Zealand Council for Teacher Education, through the Colleges of Education Accreditation Committee (CEAC);

Private providers - NZQA.

Various interested parties have explored setting up an Industry Training Organisation for Teacher Education or for Early Childhood Teacher Education, which would assume the quality assurance role of all of these bodies. This has not eventuated to date. Therefore, there is an issue of comparability of standards across these groups because they work independently.

A quality assessment process is necessary to evaluate all of the steps which result in a competent beginning teacher. Ramsay (1997) discovered a number of innovative practices among the providers at different stages: recruitment, selection, course evaluations, and students assessments in courses and during practicums. Staff also undergo performance reviews.

The teachers' professional body, NZEI Te Riu Roa, has various forms of involvement with pre-service teacher education, in part to watch over standards.

There are external moderators who ensure that schools follow national guidelines, and teachers are satisfactory. They are:

the Teacher Registration Board (TRB), which confirms each teacher's registration every 3 years, on the recommendation of the principal. In addition to the criteria established by NZQA, the TRB has an additional mandatory requirement, that the teacher is of good character.

the Education Review Office (ERO), which is the government department responsible "for evaluating and reporting on education in all schools, all early childhood centres, and all other forms of pre-tertiary education in New Zealand". (ERO 1996)

NZQA, as previously discussed; and

the Ministry of Education in its general oversight and funding role.

Who Is It For? The Cluster of Clients

Pre-service teacher education providers have the task of ensuring that lines of accountability between teachers and their client network are clearly understood. This is also an important area of in-service teacher education.

On a bad day, New Zealand teachers may feel that they are in the midst of a web of accountabilities with each thread held by different clients. There are many strands (see Figure 1). It is sometimes easiest for

a planner of teacher education to accord minor attention to the most important client in the school system - the child. The diversity of school students - 20% Maori, 7% Pacific Island, 8% with English as a second language, at least 10% with some form of physical, mental or learning disability (Ministry of Education statistics, 1995) - adds more lines to the web as each group has its own community of interest.

Teacher accountability includes to families, many of whom are looking to the teacher to help them guide their child through an increasingly complex society. Formal accountability processes are delegated by the families to the governors, the Boards of Trustees.

Is It Working? The Chalkface Conundrum

In New Zealand, we do not have a picture of the number of teachers who may be classified as either competent or incompetent. The ERO has recently asserted that a significant minority are incompetent. Teacher appraisal is an area of tension between the education policy-makers, who want to strengthen the procedures, and the teacher unions who resist such measures and contend that teacher appraisal should be mainly an internal matter.

The Ministry of Education has recently provided guidance to Boards of Trustees and school principals on the implementation of performance management systems. Performance management is ultimately the responsibility of the Boards. In practice, senior teachers or the principal are responsible for evaluating teacher performance.

Assessment of teaching practice is carried out externally as one part of ERO's review of the school. That is, the overall report on any school is based in part on classroom observations. Individual teachers are no longer given individual marks for performance.

How is Teacher Competency Maintained? In-service Teacher Education: Provision and Problems.

In-service teacher education is the responsibility of the Board of Trustees. The Boards have an operations grant which includes the professional development of their teachers. In addition, the Ministry of Education directly funds the provision of some professional development and in-service training opportunities - mainly covering aspects of curricular change.

Principals use many approaches to ensure that their schools have staff who can cope with changes to the curriculum and are aware of new trends in educational practice. For example, when corporal punishment was outlawed in schools in 1991, many schools which used caning to maintain discipline had to send staff to courses on other forms of behaviour management.

NZCER (Renwick, 1994), and Poskitt (1997), carried out research investigations into arrangements for in-service teacher education in New Zealand. Poskitt (1997) found that most principals discussed professional development needs with their staff. In some cases, there was an analysis of the needs for additional skills within the school and teachers were sent to suitable courses to address them, which may relate to specific areas of the curriculum or to broader needs, such as management. In other cases teachers requested leave to develop their skills.

In-service education may be carried out on the school or centre premises - especially if the topic is of general applicability such as a curricular change - or it is held out of work hours at a regional site. A

system of teacher-only days has been instigated by some schools. These are usually used for general planning or for teacher education. Some individual teachers go to short courses during school time. Some are released for longer periods for degree and post-graduate university study, for example. Teacher exchanges also occur. Exchanges may be between schools in different areas or between countries. Some teachers voluntarily enroll in distance education courses (Advanced Studies for Teachers Units, or extra-mural degrees) to up-grade their qualifications.

Providers of in-service education are frequently those who also provide pre-service teacher education. Other sources of courses are subject specialists from within schools, universities or Colleges of Education; the Specialist Education Service; the Early Childhood Development Unit; the New Zealand Council for Educational Research; and independent providers, some of whom may be contracted to the Ministry of Education. Poskitt (1997) found that teachers in her sample were more likely to use advisers, Ministry contracted providers, principals and teachers within their own school and College of Education personnel than independent consultants or the universities. Renwick (1994) found that NZQA courses on competency-based assessment were in great demand in the mid-90s.

Poskitt (1997) identified the main issues of concern to the teachers: the costs of in-service courses, and the fact that such training is not identified as a separate item in the schools' operational grants. They felt there is a danger that Boards of Trustees may accord low priority to professional development when faced with competing priorities. Another concern is ensuring that the course providers are the best people for the job. Most of the teachers said to Poskitt that "the Advisory Service and Ministry of Education contracts should be maintained to provide at least a minimum professional development service to the schools".

Issues in Teacher Education Identified by the Providers

Prior to this APEID seminar, the New Zealand Council for Educational Research (NZCER) conducted a small-scale consultation with teacher education providers. Most of the tertiary providers responded (six), while only one of the new entrants to teacher education did. The current issues in teacher education they listed were mostly related to pre-service provision. The issues included (in order of frequency of mention):

A set of issues around identifying the elements of, and educating for, "quality", competent beginning teachers - such as selection, assessment during training, relationships between generic and specialist courses within programmes, and relationships between school-based and campus based staff who educate the trainees and their components.

A set of issues related to the new policies for post-school education and training, which have resulted in a proliferation of new teacher education providers being accredited, competition amongst traditional tertiary providers, new modes of teacher education (such as "compressed courses" and distance courses) being approved, and pressure to respond to market demands. Funding constraints is another issue related to Government policies.

Issues related to training teachers who can meet the needs of Maori (and other ethnic minority groups), and training Maori teachers.

Issues to do with teacher pay (for example, pay relates to course length).

Issues related to approaches for the continuing professional development of teachers.

PRESENT PRIORITIES FOR RESEARCH: TEACHERS AND TEACHER EDUCATION

The New Zealand education system has undergone a revolutionary change during the past 8 years. Teacher education has been part of that change. A concern about rapid change and innovation is how to know if it works. This area for research was frequently given high priority when NZCER consulted interested parties before the Director came to this seminar. Evaluation is essential. Having said that, a recent forum on teacher education identified a paucity of teacher education research.

Priorities for Research on Teachers and Teacher Education Identified by Providers

A shift of focus was evident in these responses to NZCER's consultation. Nearly half of the priority areas related to teachers on the job and aspects of in-service professional development.

Notwithstanding, the research area cited most often was related to the competencies and knowledge base needed in initial education for beginning teachers - what is needed? What are the optimal approaches for effective teacher education (including the place and length of practicums and support of associate teachers or mentors)? How can those involved ensure adequate coverage and teaching of curriculum areas and objectives - especially mathematics, science, and literacy?

Suggested research questions relating to in-service professional development included: the relationship between pre-service and in-service programmes, the development of quality measures of highly competent experienced teachers, the implementation of curriculum (theory) into classroom practice, how do teachers acquire and practice new knowledge, what professional development approaches result in sustained change, and how do teachers act in different settings and why?

Two quite specific research topics were put forward. One was related to the predictive validity of student selection, and of student assessments, on future classroom performance. The other was about the supply of Maori teachers for the next century.

A Distillation of Priorities for Research on Teachers and Teacher Education

A number of priorities arise from the above description of changes and issues relating to teacher education. Anne Meade has suggested elsewhere (Meade, 1997) that the top priority for research in teacher education are studies of competent beginning teachers for the turn of the century and beyond.

> What are the competencies and knowledge bases needed in initial education for beginning teachers? How appropriate are the competencies already identified as necessary for beginning teachers?
>
> How do the courses of the new providers compare with those of the traditional colleges of education vis-a-vis the development of competent/"quality" beginning teachers?
>
> What is the efficacy of different modes and lengths of programmes? This could incorporate study of different practicum approaches - the different balances of course and school-based experiences, and different partnerships between schools and course providers.

Other priorities include:

Research related to quality assurance in the changed context of new providers of, and new provisions for, teacher education; for example, how comparable are their programmes and standards?

On what basis do schools select their beginning teachers? Is there a preference for graduates from particular providers and, if so, why?

How best to train teachers who can meet the needs of Maori (and other ethnic minority groups)?

What approaches to in-service professional development of teachers are most useful and effective - what professional development approaches result in sustained change? The project should check how course providers and participants use research in their learning experiences. (Graduate professions are usually marked by their use of research.)

How do different settings affect teacher performance and why? Incorporated within the same study or approached separately could be a study of school-based professional development.

Development and evaluation studies on information technology and the provision of teacher education.

THE CURRENT ROLE OF NZCER IN RESEARCH ON TEACHERS AND TEACHER EDUCATION

NZCER has two roles in relation to research on teachers and teacher education: it can help shape an agenda for research in this area for the sector, and it can undertake research itself.

Seamus Hegarty, Director of the National Foundation for Educational Research in the UK, said last year that a view of the educational research community could be that it is,

> "A glorified cottage industry of small and idiosyncratic producers ... hardly constituting a coherent system of knowledge acquisition, distribution, and utilization," (1997, p.9).

NZCER is working with the New Zealand Council for Teacher Education to take a proactive role in setting an agenda for teacher education research to make knowledge acquisition more coherent. Members of that Council cooperated in responding to NZCER's call for identification of teacher education issues, and priorities for research. NZCER is willing to assist members help to implement that agenda. For example, it could assist with the publication and distribution of research reports to enhance the utilization of findings.

NZCER has undertaken three studies in the last 5 years directly related to teachers and teacher education. In collaboration with three colleges of education, Margery Renwick and June Vize undertook a multi-year project on the development of primary student teachers through their pre-service teacher education (1993). Colleges made progressive changes to their programmes in response to the progress reports of the findings. In 1994, Renwick did a small survey of secondary schools to describe what in-service training was happening. This year, NZCER produced a literature review on teacher competencies and teacher education (Fitzsimons & Fenwick, 1997) to inform those involved with the Government's Teacher Education Review.

A study of teacher education or teacher competencies has been included in the 1997/98 work

programme. The exact research question is still being decided in consultation with the New Zealand Council for Teacher Education. A small study on the future supply of secondary school teachers by subject area is a likely contract for the Ministry of Education. In addition, NZCER and the New Zealand Commission for UNESCO has established a Beeby Fellowship on educational innovation in 1997. The school principal who has this award will include findings on the contribution of professional development to the implementation of innovations in her school. NZCER also plans to publish an edited book of articles, drawing from recent New Zealand research on teacher education.

Many other research studies undertaken by NZCER have relevance for teachers and teacher education. NZCER is currently carrying out a longitudinal study of a sample of 500 children who were selected as 4 year olds from a range of early childhood centres. They, their teachers, and parents were interviewed then, and again when the children turned 6 and 8 years of age. Analysis of the data is yielding, *inter alia*, valuable information about the links between the teachers' qualifications, professional development, and changes in the child's educational progress.

Our current programme of research projects are related to or have implications for teacher education, especially professional development in-service. They are listed below and their titles are relatively self-explanatory.

Schedule: NZCER's Research Work Programme, 1997 & early 1998

Maori Education

Effective mainstream education for Maori students

Parental concerns and involvement in the education of Maori students

Effects of Te Kohanga Reo - a Maori immersion service involving pre-schoolers and their families

Visions for Maori education

Early Childhood Education

Competent Children: effects of early childhood experiences, a longitudinal study

Evaluation of programmes based on *Te Whariki*, the Early Childhood Curriculum

Students at risk of under-achievement (Pacific Island early childhood education)

Educational Policy and Institutions

Impact of the educational reforms on primary schools

The role of the primary principal

Pacific Island Liaison for Schools

Teacher competencies

Impact of the National Qualifications Framework on students and schools

Teacher supply for secondary schools, by subject area (contract)

Learning, Curriculum and Assessment

Achieving literacy for hard-to-teach children

Assessment resource banks for assessing achievement

Information technology and education

Essential skills for the New Zealand Curriculum - assessing information skills

Writing, vocabulary and spelling, Year 1 to Year 7 children.

NZCER runs a seminar programme to share research findings and research-based resources with teachers and others interested in educational research. The links between, and usefulness of, research for classroom practice and policy is addressed by presenters in these seminars.

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GLOSSARY OF ACRONYMS

A.A.S.	Academic Audit System
APNZ	Association of Polytechnics New Zealand
BOT	Board of Trustees
CEAC	Colleges of Education Accreditation Committee
CEC	Collective Employment Contracts
CUAP	Committee on University Academic Programmes
ECS	Early Childhood Service
ERO	Education Review Office
ITO	Industry Training Organisation
NZCTE	New Zealand Council of Teacher Education
NZPPC	New Zealand Poytechnics Programme Committee
NZQA	New Zealand Qualifications Authority
NZSTA	New Zealand Schools Trustees Association
NZUAAU	New Zealand Academic Audit Unit
NZVCC	New Zealand Vice-Chancellors Committee
PMS	Performance Management System
TCA	Teaching Council Aotearoa
TEAG	Teacher Education Advisory Group

Papua New Guinea

Introduction

Education Reforms

In 1993 the Papua New Guinea (PNG) Government and Department of Education embarked on a radical reform of education. The Education (Amendment) Act 1995 provides a legal basis for the reforms in the school system. The reforms, which will take at least ten years to implement, have their origins in reports by Matane (1986) and McNamara (198?) and the Education Sector Review (1991). The AusAID Papua New Guinea Education Resources Study (1995) and the Papua New Guinea Education Resources Study: Teacher Education Resource Requirements - Working Paper No 6 (1995) have contributed to the organisational and pedagogical frameworks which locate these reforms.

The Constitution, Matane Report and the National Higher Education Plan (1990) provide the basis for Papua New Guinea's educational goals and objectives. The ultimate goal is for every citizen to receive an education that results in "integral human development".

The old education structure has community schools (grades 1-6), provincial high schools (grades 7-10) and national high schools (grades 11-12). The GER as a percentage of 7-12 year old age group[1] is approximately 73%. The trend has been a 33% transition from community school to provincial high school and 10% transition from provincial high school to national high school. English is the language of instruction except in non-formal Tok Ples Pre Skuls. The age of entry is seven although in practice this varies between seven to ten years.

A major education reform was needed to improve access and retention as well to improve standards through the process of curriculum review. Under this reform, the first level of education is the village/community based elementary school (grades prep, elementary 1 and 2), followed by primary school (grades 3-8) and secondary school (grades 9-12).

Teacher education reform

To some extent the need for reforms in teacher education is obviated by reforms in the primary and secondary sub-sectors. To assist in initiating reforms in the higher education sub-sector and in accordance with the Higher Education Plan, the Higher Education Project (HEP) was commissioned to review areas of higher education. Teachers colleges are recognised by the Higher Education Act[2] as higher education institutions. One of HEP's three specific objectives is to 'improve teacher education and thus improve the lower levels of education'[3].

Furthermore, as a result of the AusAID PNG Education Resources Study, a programme design document has been drafted for a project entitled 'PNG Primary and Secondary Teacher Education

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1 The Education Department projected population estimates for 7-12 year old age group for 1997 is 696,037.

2 PNG: Higher Education Act 1983; Port Moresby. 1983. p.2 (1.2)

3 Hayfield, S. (1996) Background to the Higher Education Project with particular reference to Teacher Education, Office of Higher Education. Port Moresby. 1996. p.1.

Project'[4] to be implemented.

Teachers and Teacher Education

Governance

A number of authorities are concerned with teacher education.

- The Department of Education (DOE) is responsible for the planning of the community school system and the teachers for its schools are provided by the colleges. The Secretary for Education is responsible for teacher registration. The staff development of teachers colleges is the responsibility of the Staff Development and Training Division of DOE.
- The Commission for Higher Education (CHE) is responsible for planning, policy and it implementation, co-ordination and overall development of higher education while the in-service provision for teachers comes under DOE.
- The Teaching Service Commission's (TSC) responsibilities include those for safeguarding the terms and conditions of service of college staff as well as teachers including the new cadre of elementary teachers, payroll, and adding to the roll of teachers those who graduate from the colleges.

Turner (1996) has recommended the consolidation of all teacher education work and activities within the Office of Higher Education.

Pre-service Teacher Training

Community Teachers Colleges (CTC) conduct pre-service training of **community school teachers**. Currently there are eight CTCs. Seven of these have been established by the churches to meet the needs of their own schools and together with Madang Teachers College and Port Moresby Inservice College (PMIC), which are government agency colleges, they form a national system of teacher education. PMIC is primarily concerned with in-service training for primary teachers but currently it also offers a three-year pre-service training in Home Economics.

The Sonoma Seventh Day Adventist College also offers pre-service training for community school teachers but it is not part of the national system. It has about sixty students and they follow a three-year diploma programme.

College enrolments for 1993-1996 are shown in Table I. Enrolment figures for 1997 were not available at the time of writing.

Table I : Enrolments in Teachers Colleges by college and gender, 1993-1996.

College	1993			1994			1995			1996		
	M	F	T	M	F	T	M	F	T	M	F	T
Port Moresby[5]	-	44	44	-	48	48	-	50	50	-	51	51

[4] PNG-Australia Development Cooperation Programme: PNG Primary and Secondary Education Project - Project Design Document, Final Draft. 1997.

[5] PMIC figures represent those enrolled in the Diploma of Home Economics.

Madang	161	178	339	192	167	359	197	151	348	178	191	369
Balob	197	100	297	184	114	298	177	120	297	166	131	297
Dauli	89	51	140	87	54	141	87	61	148	114	70	184
Gaulim	98	92	190	98	90	188	123	75	198	116	76	192
Holy Trinity	105	110	215	110	103	213	114	93	207	127	102	229
Kabaleo	-	143	143	-	136	136	-	143	143	-	148	148
Kaindi	115	112	227	110	98	208	111	110	221	118	118	236
Vunakanau[6]	140	-	140	147	-	147	106	-	106	60	-	60
Total	**905**	**830**	**1735**	**928**	**810**	**1738**	**915**	**803**	**1718**	**879**	**887**	**1766**

Source:Education Department

The number of **College staff** for 1993-1996 are shown in Table II. 1997 figures were also not available at the time of writing.

Table II: Teachers College staff by college and gender, 1993-1996.

College	1993			1994			1995			1996		
	M	F	T	M	F	T	M	F	T	M	F	T
Port Moresby	1	2	3	1	2	3	1	2	3	14	11	25
Madang	21	6	27	21	6	27	22	5	27	17	12	29
Balob	15	8	23	18	5	23	18	4	22	19	6	25
Dauli	10	1	11	10	1	11	11	-	11	13	3	16
Gaulim	14	1	15	13	2	15	12	2	14	15	-	15
Holy Trinity	11	6	17	12	5	17	11	5	16	12	5	17
Kabaleo	7	4	11	6	5	11	7	4	11	8	5	13
Kaindi	16	-	16	15	2	17	13	4	17	14	4	18
Vunakanau	10	1	11	11	-	11	11	-	11	7	-	7
Total	**105**	**29**	**134**	**107**	**28**	**135**	**106**	**26**	**132**	**119**	**46**	**165**

Source:Education Department

Training of **secondary school teachers** is conducted at the Goroka University. Goroka had been a campus of the University of Papua New Guinea until this year when it received full university status. Trainees receive specialised training in subject areas.

Enrolments at Goroka University for 1994-1996 is shown in Table III.

[6] At the end of 1996 Vunakanau was closed and its students have since been absorbed by Kabaleo.

Table III: Total Enrolments at Goroka University by gender, 1993-1996

1993			1994			1995			1996			Totlal		
M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
229	168	397	311	203	514	379	249	628	359	198	557	1278	818	2096

Source:Education Department

The number of **staff** at Goroka University is shown in Table IV.

Table IV: Goroka University staff by gender, 1993-1996.

1993			1994			1995			1996			Total		
M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
37	12	49	36	12	48	42	13	55	34	13	47	149	50	199

Source:Education Department

Training of **elementary school teachers** which is a new undertaking under the education reform is the responsibility of DOE. So far the Department of Education (DOE 1996b) has developed initial policies to meet the needs of elementary teacher training. The training programme involves the following:

- First is the **training of trainers** which takes place at the Port Moresby Inservice College (PMIC). Trainers are awarded an Elementary Training Certificate (ETC) upon successful completion. The ETC has three components which are training at PMIC (phase 1 & 2 covering course work which includes some local practical experience)[7] and finally trainers beginning work in the provinces (phase 3). There is a selection criteria[8] and trainers are selected by DOE on nomination by provinces.

- The second task is that of the **training of elementary teachers**. This is being done at the province/district level over a two year period. The teachers are awarded the Certificate of Elementary Teaching (CET) upon successful completion. CET training involves workshops, short courses and group meetings as well as training provided by visiting trainers[9]. CET subjects are written as 'self-instructional units'. CET precedes full elementary teacher registration.

The enrolments in elementary schools and number of teachers are shown in Table V and Table VI respectively. It should be noted that these are the figures received to date by the Education Department from the provinces but not all provinces have submitted figures including a known number of those which have elementary schools.

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7 The courses are of 8 weeks (phase 1) and 16 weeks (phase 2) duration.

8 (a) teaching certificate or equivalent (b) a recognised training qualification, or a recognised qualification in the literacy area, or satisfied the requirements of an established process of Recognition of Prior Learning acceptable to the Governing Council of PMIC. Also ETC students with a previous literacy qualification and field experience may be exempted from the Phase 1 course.

9 'A Training Manual' and the 'Elementary Teacher Training Workbook' documents are to be introduced in 1997.

Table V: Enrolments in elementary schools by level and gender, 1996

Level	male	Female	Total
Prep	2923	2639	5562
Elementary 1	591	561	1152
Elementary 2	216	189	405
Total	3730	3389	7119

Source:Education Department

Table VI: Total number of teachers in elementary schools by level and gender, 1996

Level	male	Female	Total
Prep	91	81	172
Elementary 1	31	7	38
Elementary 2	3	9	12
Total	125	97	222

Source:Education Department

PMIC also caters for the pre-service training of **vocational centre teachers**. Trainees are selected from two groups - (a) those who have trade qualifications for the one year 'Certificate of Teaching in Vocational Centres'[10], and (b) those with Grade 10 qualification for the three-year 'Diploma of Teaching in Vocational Centres' programme.

In-service Training

The importance of in-service training cannot be stressed enough. Much effort is made in the face of limited resources to provide some in-service training during the school year. Training takes different forms.

- **School-based** in-service is ongoing, both for primary and secondary schools. School needs and circumstances as well as available resources and opportunities are taken into account when designing and planning these activities. Headmasters and school inspectors are expected to monitor these activities. There is also opportunity for teachers to meet at **local or provincial levels** during what is known as 'National Inservice Week'. The organisation and planning is left largely to the headmasters, inspectors and Assistant Secretaries of provinces. While the focus of these activities may vary from province to province and from year to year, the general objective is that of increasing teachers' awareness plus improving their skills and knowledge for the areas of their work.

- Sometimes special **training packages** are designed and prepared in areas such as school finances or leadership, and training conducted in central locations for groups of teachers.

- **In-country residential courses** are also offered. Port Moresby Inservice College currently runs the Diploma of Education Primary (In-service) which involves about 150 teachers[11]

[10] The Certificate course is presently limited to 15 places.

[11] When this course began in 1996, the 150 students include 50 primary school inspectors.

per sixteen weeks. Goroka University offers the Post Graduate Diploma of Education, Advance Diploma of Teaching (now discontinued largely owing to inadequate funding), and Bachelor of Education (In-service)[12].

- Presently a small number of teachers are on **post-graduate studies**[13] overseas under the Australia and New Zealand aid programmes.

- Also, various short-term courses, part-time and distance education opportunities are available to teachers and school heads.

The **quality and success** of school or province based in-service is dependent on the input of school heads, inspectors as well as the participating teachers. But programmes do not always receive adequate funding, even if they are well prepared. **Funding** is a continuing issue with all programmes.

Special Education

A number of Special Education Resource Centers (SERC) operate in close proximity to teachers college locations. About 30 staff holding Teaching Service positions work in these centres. SERCs operate in the context of college and community needs. Staff take part in college programmes and they visit homes and schools.

SERCs use existing curriculum materials and syllabus prepared by the Department but a National Content Guidelines for teachers college courses in special education is being developed and will be introduced in 1998 (Ministry of Education 1996).

Curriculum

A new three year course in the colleges has been introduced and Grade 12 is the new entry qualification.

The CTC curriculum is organised into curriculum strands of which there are five. These are the Professional Development, Social and Spiritual Development, Community Development, Language Development, and Maths-Science Education.

Secondary teachers follow a programme of subject specialisation at Goroka University. Student select subject combinations, e.g. Maths/Science, subject to their performance levels.

Funding

Higher education (excluding universities) is included in the Department of Education appropriation. In 1996, for example, the Education appropriation was over K73 million for which higher education received over 27% and teacher education 8% (DOE 1996a).

DOE's budget is responsible for salaries of lecturers which include boarding duties and demonstration teaching allowance. The present salaries budget for national and expatriate staff is

[12] The BEd(Inservice) programme is probably the most popular programme. In 1994 there were 54 graduates, 1995 (36), and 1996 (49).

[13] Four successfully completed their studies in 1994, 7 in 1995 and 8 in 1996.

over K1.5 million. In addition the Department covers areas such as library allowances, materials and supplies, ancillary staff wages all of which amounts to over K400,000 per year. The unit costs per teachers college student per year is about K240. The Office of Higher Education is responsible for meeting the costs for maintenance plus board and lodging, tuition fees, equipment and book allowance. In 1995 and 1996 for example, OHE provided K700,000 and over K270,000 respectively for these costs[14].

HEP issues

Turner (1994, 1996) investigates a number of teacher education issues. These include the following which are discussed further in his Second Report (1996):

- Given that a number of authorities are concerned with teacher education **co-ordination** is an obvious issue. The newly established National Council of Teacher Education (NCTE) therefore has an important role in the context of education reforms and a proposal to have teacher education under the higher education sub-sector. NCTE would be concerned with matters such as assessments, institutional accreditation, validation, curriculum and syllabus, teaching practice structures and methodology, staff appointments and teacher registration.

- The report emphasises the need to recognise the 'key role' of the teacher educator.

The Report also discusses the following as possible strategies for improving the present situation.

- **College staff should have primary school teaching experience** and, where they don't, opportunities should be provided in the colleges by which they should gain some teaching experience in primary schools when they are appointed.

- Creation of a **Department of Primary Education at UPNG**[15].

- **Opportunities for college staff** to improve their skills and knowledge through further training during the course of their appointments.

- The report emphasises the **value of research** in primary education and is simultaneously critical of the fact that aspects of the reform had not been tested through the process of research and evaluation prior to their introduction.

- The question of the **size of colleges** is discussed primarily in terms of an issue of the **quality of educational experience** colleges can offer to students. Smaller colleges have been favoured for a long time in PNG and the Report takes into account both their advantages and disadvantages. The report prefers larger colleges and concludes that "small colleges cannot, at an acceptable level of staffing and material provision, give the quality of teacher education which is required, where subject content is of an importance and range which has never previously been equaled, and where the complexities of teaching in the

[14] All estimates were provided by the Staff Development and Training Division of DOE.

[15] This proposal may have to be considered in the context of Goroka's new status as a university.

changing culture of Papua New Guinea provide a striking challenge even to the most thoroughly prepared"[16].

- With **curriculum and syllabus,** only parts of the curriculum are being reviewed[17]. Staff shortfalls can have a critical consequence on the courses that are being offered. Sometimes it may lead to a particular course(s) not being taught. Taking into account the present situation and the changes brought about under the education reform, the Report has recommended a review of the total Community Teachers College curriculum.

Research Priorities and Development Work

Among the tasks of NCTE now that it is established and in operation, is to study the reports including the HEP consultancy reports, in order to assist in planning the future development work in teacher education. It is expected that NCTE will also play a leading role in determining research priorities and development work in teacher education especially in the medium term.

A number of areas that are expected to be strengthened and enhanced through the Primary and Secondary Teacher Education Project (PNG/Aust Development Co-operation Programme 1997) include the following:

- The upgrading of the skills of primary teachers to meet the changing needs of the school system through such measures as the strengthening of the teaching and learning resources in teachers colleges, curriculum review, upgrading of content knowledge of college lecturers, upgrading teaching methodologies, improvement and supply of materials and equipment, management and administrative training.

- The secondary teacher education is also expected to be strengthened through the provision of technical assistance, provision of learning materials and equipment and additional facilities.

- Special education will also be enhanced through measures such as increased staffing and leadership capacity, material and equipment provision, upgrading of the skills of staff, development of special education in colleges, staff housing.

- Teacher educators are another group for which much attention will be paid. Further professional experience of lecturers is aimed at through further professional training, workshops, institutional linkages with an Australian university, and access to information and technology networks.

- The project will also be concerned with infrastructure development for teachers colleges.

Again, it could be assumed that subject to the outcomes of the above projects, DOE will identify possible directions in which research work can be undertaken both in the medium and long term considerations of the overall development work in teacher education.

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[16] Turner, John D. (1996) Second Report on Teacher Education in Papua New Guinea, for the Higher Education Project , Part 2. Boroko. CHE/ADB/IDP Higher Education Project.

[17] English, Maths, Science and Social Science are being studied while not under review at present are Expressive Arts, Spiritual & Moral Education, Community Development, Library studies, the teaching of vernacular languages, Agriculture, Health Education, and Physical Education.

Research Activities

The work on the Higher Education Project is continuing and much of the present focus is on how teacher education issues are being dealt with through the work of the Project. There is, therefore, no major current research work being undertaken. It is anticipated that from the recommendations arising, and some have already been made in reports so far presented by the Project consultants, the Department may wish to purse new directions in the light these recommendations. It can also be anticipated that some of the proposals that the Department wishes to pursue vigorously, may require further study through the process of research and evaluation in order that the Department of Education arrives at firm and well informed decisions for implementation.

Summary

The reforms in secondary and primary education have begun to be implemented and these should lead to improvements in the overall system of education for the people of Papua New Guinea. Reforms in the teacher education are been initiated now and the further investigations of development issues and measures should lead to achieving improvements.

The role of research is recognised as important and new initiatives and proposals can have the benefit of being scrutinised initially through the process of research and evaluation prior to their formal introduction to the system.

Some new possible directions have been identified in terms of development work. It is envisaged that new directions are likely to emerge as a result of the consultancies and projects that are being undertaken. This in turn should enable DOE to determine and pursue relevant research and evaluation activities in the area of teacher education.

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Philippines

Introduction

In the first place, it is my pleasure and privilege to greet the National Institute for Educational Research (NIER) of Japan on the occasion of the 30th anniversary of NIER-UNESCO co-operation. We are indeed very happy to join you in this celebration. This conference is a very prestigious gathering, ready to zero in on excellence.

Likewise, we are pleased to congratulate you for providing the opportunity to discuss and talk about a very relevant theme: "Teacher, Teacher Education and Development." The theme concentrates on the principal performing actors of the teaching-learning process. While the child is the center of the process, the teacher provides the techniques, strategies and methods and plans the activities to enable him to arrive at his goals. The teacher controls, pilots and orchestrates the process and with his role, it is necessary that the teacher continues to grow and develop especially in this age of the "instants" and the pole vaulting to the next century. This conference can set the educational mission in the Asia-Pacific region especially as it concerns the teacher.

Wise men throughout the world and throughout the ages have recognized the value of education. Education is a very important variable for enhancing economic progress. Filipinos attach a very high social, economic and political value to education. Education is generally positively associated with level of schooling, thus, a college graduate is expected to be assured of high social and economic status. It has therefore, become the supreme ambition of every Filipino family to send their children to college no matter how much sacrifice it may entail. Teacher education is the most inexpensive college course in the country. Thus, even the average-income parents are often heard advising their children to take a teachers' course.

Mandates to Provide Quality Education.

The 1987 Philippine Constitution affirms the vital role of quality education for the attainment of our national goals as provided for in Section I, Article XIV that "The State shall protect and promote the right of all citizens to quality education at all levels and shall take appropriate steps to make such education accessible to all." It also recognizes that quality education cannot rise beyond the quality of the teacher. The teacher being the key to the effectiveness of the teaching-learning process must also be developed. Thus Section 5 (4) states that "The State shall enhance the right of teachers to professional advancement."

Towards Better Quality of Education

Since the establishment of the Bureau of Education, surveys have been undertaken to help improve quality. We had the Monroe Survey in 1925, the Swanson Survey in 1960 and the Philippine Commission to Survey Philippine Education in 1970. All these surveys tried to articulate the misgivings and state of affairs of the country's educational system during the period and steps had been undertaken to improve the system, based on their findings and recommendations. The bilingual policy was conceived (NBE Resolution No. 73-7 s. 1973) where some subjects (Science, Math and English) were taught in English while the rest in Filipino. Presidential Decree No. 146, otherwise known as the National College Entrance Examination (NCEE) law, was issued in 1973 which balanced the inflow of students in degree courses. In the later 1970's the NCEE cut-of-score

required to enroll in a teacher's course in the NCEE was made much higher than the general cut-off score for other degree courses. This was also one way of improving the quality of students going into teaching.

The Magna Carta for public school teachers (RA 4670) approved in June 1966 was an attempt to improve the social and economic status of public school teachers, their living and working conditions, their employment and career prospects in order that they may compare favorably with existing opportunities in other walks of life. The aim was to attract and retain in the teaching profession more qualified people, it being recognized that advance in education depends partly on the qualifications and ability of the teaching staff and that education is an essential factor in the economic growth of the nation as a productive investment of vital importance. It specifies the code of professional conduct of teachers and that aside from their professional requirements outside the general civil service rules and regulations, they are asked to maintain a good social standing; a good relationship with co-workers, parents and community leaders; and to be discrete in their speech, their manner of dressing and their political behavior.

The Education Act of 1982 is an Act that governs both formal and non-formal systems in public and private schools at all levels of the entire educational system. It spells out the rights of students and school personnel and the duties and obligation of parents, students, teachers and school administrators.

In 1991, an Education Commission (EDCOM) was created which was mandated to conduct an empirical study on the educational system. The commission discovered many constraints, the heart of which is the teacher.

Poorly Trained Teachers. Many high school teachers in science and math do not have even the minimum preparation for teaching the subjects (54.6 percent). Only three percent of technical-vocational teachers have the required industrial arts training or experience. In the Philippine Board Examination for Teachers (PBET) administered by the Department of Education and the Civil Service Commission as authorized by PD 1006, the following were the percentages of passing, with the highest scores obtained mostly by non-education graduates:

Year	Total No of Examinees	Passing Examinees	Percentage
1990	140,068	14,847	10.60%
1991	130,442	17,972	13.78%
1992	142,133	35,951	25.29%
1993	130,889	44,976	34.19%
1994	165,906	43,007	25.97%

Another research study was confirmed by EDCOM which indicated serious flaws in the qualification of teachers in math, physics, chemistry, biology and general science. According to the EDCOM the following are the percentages of qualified teachers teaching the subjects:

Mathematics 54.67%

Physics 4.44%

Chemistry 15.41%

Biology 30.51%

General Science 33.90%

It may be difficult to upgrade the capabilities of teachers in the sciences and mathematics considering that very few teacher-training institutions are offering these subjects as major. There are 655 teacher-training institutions in the country but only 48 offer biology as major; 20 chemistry and only 15 physics.

In a study undertaken by Bro. Andrew Gonzales and Dr. Bonifacio Sibayan, it was revealed that quality of teachers is good enough up to Grade IV. This implies that we have a problem with the teaching staff in the last years of the elementary grades and that Grade VI pupils are capable of performing only what Grade IV can do. There is no insignificant difference between the grade V & VI performances in achievement tests.

Another interesting information is that in 1991 the Department of Science and Technology (DOST) tested both teachers and students in the first year of the Secondary Education Development Program (SEDP). The total mean percentage score (54.08%) of the first year high school teachers was only 8.79 points higher than those of the students (45.29%). The teachers had a lower mean score in Filipino (56.88) than the students. This deplorable performance can be traced to poor teacher training and perhaps the low quality of students enrolled in teacher training education program.

Recommended Reforms. The commission recommended educational reforms in order to improve the declining quality of education. Among those which aim to raise the status and self-esteem of teachers and uphold the dignity of their profession are:

1. **Professionalization of teachers and teaching**. Like other courses a teacher should pass a licensure examination given by the professional board under the Professional Regulatory Commission. There should be a Code of Ethics for and by Teachers to make the teaching profession self-regulating and self-governing. As well, the required minimum qualifications, computer literacy for teachers and for trainors should be enforced.

2. **Creation of well-defined career service paths for promotion and career planning for teachers and administrators**. Two career paths are open to teachers:

- the designated teacher career path with promotional apex reached at Master Teacher level VII.
- the administrators' path beginning with Assistant Principal I.

3. **Strengthening of pre-service teacher education.** Career Centers of Excellence for Teacher Education in every region should be set up, developed and strengthened and teacher programs should be accredited.

4. **Improvement and expansion of in-service training programs for both public and private school teachers.**

5. **Improvement of teachers' welfare and benefits.** This includes participation of teacher

organizations in matters of policy; protection of their right to associate freely and collectively; free legal services in case of service-connected administrative and criminal charges; safeguards in the form of protection, insurance and hazard pay; limitation of non-teaching activities; provision of enough instructional supplies, equipment and facilities, and comprehensive medical and dental care.

6. **Encouragement of teacher organizations which would look after teachers' welfare and conditions of employment and encourage professional growth.**

Laws to Improve Teacher Quality

The following laws were enacted after the Education Commission to help improve some of the deficiencies on teacher preparation.

Republic Act No. 7784 otherwise known as the "Act to Strengthen Teacher Education in the Philippines by establishing Centers of Excellence" was enacted and signed into law on August 4, 1994. It aims to "provide and ensure training of teachers nationwide through a national system of excellence for teacher education." It defines "teacher education as pre-service education, in-service education, and graduate education of teachers in various areas of specialization." This law has made growth and advancement of the teaching profession a vital component of quality education.

Republic Act No. 7863 entitled "The Philippine Teachers Professionalization Act of 1994" was enacted on December 8, 1994 granting to the Professional Regulatory Commission the critical function of supervising and regulating the teaching profession. It screens out among the professional aspirants the ill-prepared, the unqualified and the incompetent. It helps maintain and develop high standards of teaching and preparation to insure that only those meeting such stringent requirements are issued licenses to practise.

Pursuant to this act Licensure Examination for Teachers (LET) is administered for quality control over the academic preparation of teachers. The processing and scoring of this test are done by computerization in order to remove the human element of subjectivity and error in correction.

In-Service Teachers in Basic Education - The Situation

1. The Office of the Planning Service of the Department of Education, Culture and Sports (OPS-DECS, 1997) reported that as of June 1996, the Philippines has a total number of 342,327 elementary grades teacher. Of this number 319,504 (93.33%) are teaching in the public schools and 22,823 (6.67%) are in the private schools. In the secondary level, 104,347 (72.22%) are public school teachers while 40,140 (27.78%) are private school mentors.

2. Of the 319,504 elementary grades teachers in the public schools, 19,055 (5.96%) are handling 11,283 multigrade classes (3 or more grade levels).

The present basic salary of the lowest paid public school teacher is P8,605 plus fringe benefits amounting to P2,051. Thus, a total of P10,656 monthly salary was given effective January 2, 1997 which was equivalent to an increase of around 62% of their 1996 monthly salary.

4. Proportionately, the Philippine teaching force is dominated by female teachers (86.64%) and their male counterpart accounts for only 13.36%. It implies that the teaching profession is not attractive to most of the male students and that teaching is dominated by the weaker sex. It was also

found that the higher the administrative position is, the higher the proportion of male versus female becomes. Thus, there are eleven male Regional Directors as against five female; three male Undersecretaries against one female and three male Assistant Secretaries as against one female.

5. On the average, OPS-DECS (1997) reported that 7,842 teachers are retiring every year. In 1995 NETRC-DECS estimated the average turnover of teachers as 2,464 every year. The reasons for the turnover were resignation, transfer of work, going abroad, mortality, expulsion and promotion. Hence, more or less there is a total of 10,306 natural vacancies of teaching positions in the public schools every year.

6. Cortes (1993) conducted a State-of-the-Art Review of Researches on Teacher Effectiveness in the Philippines (1965-1977). She reviewed only 54 studies out of the 1,182 for reasons of methodological adequacy and substantive significance. These are experimental and quasi-experimental studies, ex-post facto survey research and two of three case studies in the total of 1,182.

7. Her review focuses only on studies dealing with 1) The Teaching Situation Related to Learning Outcomes; 2) Teacher Factors Related to Learning Outcomes, and 3) Teacher Factors Related to Teaching Situation.

Summary of Cortes' Findings. On the basis of the studies examined in connection with this review, Cortes (1993) found that research on school outcomes and teacher effectiveness in the Philippines can be classified into five categories: a) Studies on Student Factors; b) Studies on Teacher Factors, c) Studies on School Factors, d) Studies on Instructional Methods; and e) Studies on Other Factors.

1. The following teacher characteristics were found as correlates of teacher effectiveness:

   1.1 graduate units and number of units earned in the subject(s) taught

   1.2 length of teaching experience

   1.3 teacher expectation of student's performance

   1.4 some personality traits

   1.5 IQ or mental ability

   1.6 other related variables: salary, teacher turnover, teaching load and teacher-student ratio.

2. In-service training effects observed by different researchers appeared to have similar findings

3. Teaching situation factors clustered around the methods used by the teacher

4. Although the majority of studies on teacher effectiveness focused on the teachers themselves as the unit of analysis, either individually or collectively (largely as a group), studies relating to teacher characteristics, students achievement and other school outcomes are scarce.

This following report is based on the initial findings in the Philippines of the First ASEAN

Collaborative Research in Education as cited by Cortes 1993.

1. The Image of the Teacher-in-Practice

   1.1 A female, 31-40 years old if the teacher is an elementary or secondary school teacher

   1.2 Aged 41-50 if a college teacher

   1.3 Teachers belong to the middle class but enjoy some social prestige in the community, with the college teachers appearing to have higher prestige than teachers in the elementary and secondary level

   1.4 Elementary school teachers are observed to have come largely from towns and countryside while the secondary and collegiate teachers come mainly from towns and cities.

2. Desired Traits and Attributes of the Ideal Teacher

   2.1 Elementary school teachers must be approachable, have concern for their pupils, and be models of good and proper behavior

   2.2 Secondary school teachers must be approachable, intelligent, and models of good and proper behavior

   2.3 Tertiary teachers should be intelligent, open-minded, and highly professional

3. Expected Skills/Competencies of the Ideal Teacher

   3.1 Fluency and proficiency in the language of instruction

   3.2 Skills in the use of teaching methods appropriate for the class and activity

   3.3 Mastery of the subject/discipline taught

   3.4 Skills in maintaining order and discipline in class

4. Most Desired Privileges/Benefits

   4.1 Proper work conditions

   4.2 Incentives for professional growth

   4.3 Higher salaries

   4.4 Participation in curriculum development

   4.5 More fringe benefits

   4.6 Participation in the formulation/revision of education policies

Present Priorities for Research and Development Work

I. Pre-Service Preparation for Teacher

Teacher preparation - what kind of on-site preparation program should pre-service teachers be exposed to in order to accommodate the latest developments in elementary and secondary

education?

II. In-Service Teacher Education and Development

A. The Learning Environment in High, Average and Low Performing Schools in the Philippines as They Relate to the Teacher Preparation and Development

This research focuses on the school set up, facilities, school plant, classroom size and structure, and teacher qualification, preparation, education and training. The school set up, facilities, school plant and classroom size are external to the duties and functions of the teachers as these constitute administrative and supervisory functions. Classroom structure may not be a major task of the teacher as this is provided from the moment the teacher gets into the room. However, structuring the room for a conducive teaching-learning atmosphere with the needed instructional aids is certainly the teacher's responsibility.

Educational preparation and advanced studies are certainly left to the teacher to undertake and undergo. Training on the other hand through seminars and workshops are left to the discretion of the supervisors and not all teachers may be given the chance for the in-service development.

This research is planned, to identify what are present or absent in high, average and low performing schools relative to the development and education of teachers.

B. Monitoring and Evaluating the Effect of the Long Range, Medium and Short Range Teacher Development Program through the Program for Basic Education (PROBE)

The PROBE is the latest innovative program in education in the Philippines. It is designed to provide training for public school teachers, both high school and the elementary levels. Initially, the training is focussed on Mathematics and Science teachers in schools divisions included in the Social Reform Agenda of President Fidel V. Ramos of the Philippines.

This research area is envisioned to monitor the effectiveness of the training of the beneficiary-teachers through the improved achievement level of their students and the preparation of instructional materials as compared with the non-beneficiaries of the training. Lesson planning is one area which monitoring and evaluation is planned to zero-in on.

Formative and summative evaluation as well as periodic monitoring will be conducted. One component of evaluation will be assessment of teaching-learning outcomes.

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Republic of Korea

A. Description of the Korean Situation

1. An Overview of Teachers and Teacher Education

1.1 The Teacher Education System

The majority of Korean teachers are trained at one of three institutions: teachers colleges, colleges of education in universities, and teacher certification programs in universities. Teachers also receive training at departments of education in general colleges, the Korea National University of Education, junior vocational colleges, the Air and Correspondence University, and graduate schools in education. Every year, there are 40,000 candidates for these training programs.

Most kindergarten teachers are trained at junior vocational colleges, but some also attend 4-year colleges or Air and Correspondence University.

Most elementary school teachers are trained at one of the 11 national teachers colleges which were upgraded, in 1981, from two-year junior college to four-year college granting bachelor's degree. About 4,500 elementary school teacher candidates are trained annually.

An important characteristic of elementary school teacher education in Korea is that the government plays a critical role in pre-service training, certification, and teacher selection. Thus, teacher training is both prescriptive and standardised and can only be attained at specialised and accredited teacher colleges. Under this closed system, the government also gains greater influence over the quality and form of elementary school education, a priority since elementary education is compulsory in Korea.

By contrast, secondary school teacher training is relatively open, although equally prescriptive. Training for secondary school teachers is offered at national and private universities and can follow for different avenues: colleges of education (both national and private), teacher certification program at universities, departments of education in general colleges, and graduate schools of education. The last three options are open systems, since the purposes of general colleges and universities are not limited to teacher training.

Among these programs, colleges of education and teacher certification programs at universities have assumed a primary role in training secondary school teachers. In the case of colleges of education, 10 private institutions provide training, compared with 10 national institutions, and teacher certification programs are available at 85 universities. In order to enter a teacher certification program, students should earn better than a B grade or 80 points during the freshmen year.

1.2 Structure and Management of Curricula in Teacher Education

As dictated by the Education Law, colleges and universities must provide both general and core curriculum, which is then further divided into elective and required courses. All teacher education institutions must follow these set guidelines, which clearly determine credit hours spent on each curricular area.

Over a 4 year period, every student in elementary school teacher training is required to take a total of 150-151 credit hours (163-181 hours). The curriculum consists of 46 credit hours in liberal arts, 83-84 credit hours in core subjects, and 21 credit hours in advanced core subjects. Liberal arts classes are provided in the humanities, social sciences, natural sciences, and physical education, and of these 65 percent are required and 35 percent are elective. Elective courses are provided in humanities, Korean language and literature, foreign languages, social sciences, natural sciences, and the arts. These guidelines help establish uniformity among all teacher colleges.

In comparison, curriculum and curricular management vary among colleges of education for secondary school teacher training. Graduation requirements for colleges of education in universities include completion of a minimum of 140 credit hours of classes. Although 140 credit hours are required at most private universities, national universities actually require 150 or more credit hours. The curriculum is comprised of three areas: general subjects (20%), core subjects (60%), and elective subjects (20%).

1.3 Student Admission Policies and Scholarships at Teacher Education Institutions

Student admission policies at teacher education institutions generally follow those of general universities and colleges, in regards to methods and procedures for student selection. However, since 1991, these institutions have adopted interviews and aptitude tests, which count for 5 to 10 percent of the applicant's total evaluation. Each institution develops their own strategy and method for the interviews and aptitude tests.

In the past, students attending national teachers colleges or national colleges of education were exempted from paying tuition. However, in 1990, a court decision abolished all such privileges. In response, a special scholarship, called the "Sado Scholarship," was introduced in an effort to attract high quality candidates to national teacher education institutions.

1.4 Teacher Certification and Recruitment

All graduates from teacher training institutions are required, by law, to be certified by the Ministry of Education. This process ensures that the teachers are adequately qualified and it also instils teaching with a sense of commitment and professionalism. Teachers are classified into assistant teachers, second level teachers, first level teachers, vice principals, and principals. There are also special certifications for special education teachers, counsellors, librarians, vocational education teachers, and nursing teachers. Elementary and secondary school teachers (second level teachers), who graduate from an accredited institution, are often certified without an examination. However, some kindergarten teachers and assistant teachers are certified through examinations

Certification does not necessarily mean employment. Prior to 1990, recruitment policies gave priority to graduates from colleges of education of national universities and national teachers colleges. This policy was recently ruled unconstitutional and has been subsequently abolished. Currently, prospective teachers are recruited through open competitions, which include teacher selection examinations.

1.5 In-service Training

There are five categories for teacher in-service training: training for certificates; general training; professional job training; special training; and overseas training. Such training often opens doors for

teachers, who are seeking promotion. Training programs allow qualified personnel to acquire the certificates for first and second level teachers, vice principals, librarians, and counsellors. The certificate programs last 30 days (180 hours), or longer, and are provided by regional teacher training institutes. The general training aims to refresh the teachers' knowledge about theory and methods of teaching and learning. It requires participants to complete 10 days (60 hours) training or more.

2. Major Problems and Issues

2.1 Imbalance between Teacher Supply and Demand

An over-supply of certified teachers has created various problems in teacher recruitment. In 1996, only 73.5 percent of elementary teacher certificate holders and 22.5 percent of secondary teacher certificate holders from national institutions were actually recruited by schools.

This problem is the result of increases in university enrolment and lapses in long-term planning for teacher training and recruitment policy. As the economy slows, more college students choose to become teachers, but the turn-over rate for teachers has decreased. Furthermore, both a decrease in school enrolment and the subsequent integration of small rural schools have resulted in a decrease in employment opportunities. Under these conditions, conflicts have grown between national and private institutions, because preference is given to graduates of national institutions. As noted earlier, after a court decision, a new teacher selection examination was initiated in 1991.

However, there has been criticism that important teaching characteristics are neglected in the selection process because of technical limitations in the teacher selection examination. Moreover, national institutions suffer the loss of bright college students because no employment guarantee is provided.

2.2 Socio-economic Status and Working Conditions of Teachers

The socio-economic status (SES) of Korean school teachers is considered to be low when compared to that of college professors or other professionals. As of 1996, the annual salary level for teachers was between US$ 18,315 and US$ 45,620. A teacher's salary and benefits are comparable to those of most public employees, but are lower than employees in industries. Despite a long tradition of Confucianism, which holds teachers in high respect, social attitudes about teachers are decreasing. In fact, according to research, 80.6 percent of teachers perceive that the SES of teachers is lower than that of other professionals.

In terms of working conditions, the burden on teachers is very high. In 1996, the average class size was 35.7 at the elementary school level, 46.5 at the middle school level, and 48.9 at the high school level. In addition to their teaching duties, teachers must spend many hours on additional administrative work. The lack of specialised administrative support may even force teachers to be involved in extra, miscellaneous work. And, their offices are not well furnished.

Most teachers believe that they are not adequately compensated in terms of remuneration and working conditions, which then results in low teacher morale. That is, the low socio-economic status accorded to teachers influences teacher morale negatively, and may result in failing to attract bright young people to teaching.

2.3 Relevance of Curriculum

In terms of curricular arrangement, the differences between teacher education institutions and university certification programs is almost indistinguishable. This situation has lead to criticism, since it indicates that colleges of education, as mandated institutions, are not fulfilling their designated role. In addition, the student teacher training period of 4-6 weeks for secondary school teachers is not sufficient in terms of either time or actual content.

Another problem is that teachers for middle school and high school are trained through the same program, even though these school systems are separate and their curricula is different. In most cases, the training focuses on high school teaching and thus, teacher trainees are not fully prepared to teach middle school. For example, social studies and science as taught in middle school and high school are quite different.

In addition, most training courses on curriculum, especially advanced courses, are only offered according to the expertise of the faculty members. As a result, the subjects covered are often selective and very narrow. The problem is more serious for elementary school teachers who must have integrated knowledge rather than narrow and partitioned knowledge. And a lack of practical training in diverse teaching methods, needed to meet individualised teaching needs, is another task in the curriculum arena.

2.4 Attracting and Training High-quality Teachers

The quality of teacher candidates has fallen significantly, since many bright young people are now being lured into other occupations and new industries. For instance, before 1994, the average academic capability of teachers college entrants was higher than that of most other university and college majors. However, the average score on the Scholastic Aptitude Test for teachers college entrants has become lower than that for other majors.

Problems in teacher remuneration and working conditions may contribute to this problem. In addition, poor conditions at teacher education institutions, in terms of educational facilities and the quality of teaching staff, seems to hinder quality control in teacher training. Inappropriate systems, not only in teacher training, but also in teacher certification and recruitment, are factors in the failure to attract high-quality college students to the teaching profession.

Considering the importance of this issue, a movement to establish a special law to improve teacher compensation and working conditions has been proposed by teachers' organisations and politicians. Some educational scholars are proposing new procedures to screen high school graduates for entrance into teachers colleges prior to the student screening at other universities. Other scholars have proposed that comprehensive scholarships should be established.

2.5 Feminisation of Teaching

The rapid growth of the female teacher population may be observed in many developing and industrialised countries. In Korea, for instance, approximately 56 percent of the elementary school teachers and some 80 percent of the students at teachers colleges are female. Furthermore, these percentages are consistently growing. This trend indicates that school teaching is a preferred category of employment for female college students, but not for male college students.

Therefore, attracting high quality male candidates into teaching seems to be a policy priority at this

point. Scholarships and a waiver system for military service could be considered for this purpose. However, in the near future, teacher training policy will also have to focus on attracting bright female candidates, who may also choose to follow more prosperous careers, in fields previously closed to women.

B. Present Priorities in Research and Development

Priority should be given in research and development work, in the area of teachers and teacher education, to the "activation of a teaching society," which according to the Presidential Commission on Education Reform will then lead to a high quality of education. In order to activate a teaching society, the following five aspects are deemed important.

(a) Reforming the teacher pre-service training system to produce high quality teachers with expertise in subject areas and a high commitment to teaching

- Establish an evaluation system for teacher training institutions to promote competition among institutions
- Adopt an adequate supply-demand policy for secondary school teachers under the current situation of over-supply
- Solve problems with elementary school teacher training at teachers colleges, caused mainly by their small size
- Explore training programs for elementary and secondary teachers at the graduate level

(b) Validation of teacher selection procedure

- Establish a two-stage procedure for teacher selection, for example, a written examination for the first, and the utilisation of various records for the second
- Involve an evaluation-specialised institution in the written examination and local school districts in the second stage of the selection process

(c) Diversifying teacher certification and employment status

- Diversify the status of contract (non-tenured) teachers such as 'industry-school concurrent teachers' and 'visiting teachers'
- Expand the number and the role of teachers who belong to a district and teach students district-wide
- Grant certification for teaching in two or more subject areas
- Revise the certification standards for social studies and science in order to consolidate curriculum areas at the middle school level

(d) Improvement of the educational administrative system in order to provide specialised support for teachers

- Restructure certification and selection systems for supervisors
- Provide research funds and miscellaneous support for teachers

- Provide adequate programs for in-service teacher training
- Establish staff exchange programs between schools and teacher pre-service training institutions.

(e) Improvement of teachers' welfare system

- Expand the function of current teachers' welfare institutions such as The Korean Teachers' Mutual Fund and The Korea Teachers Pension
- Encourage the role of local school district in providing incentives for teacher welfare
- Devise a mechanism to insure that teachers are free from liability in school accidents

C. Research Activities by KEDI

As a central government-funded organisation firmly devoted to research and development in education, the Korean Educational Development Institute (KEDI) is currently undertaking the following research with respect to teachers and teacher education.

(a) National Evaluation Project for Korean Teacher Training Institutions

KEDI and the Ministry of Education are to launch a national evaluation project for all types of teacher training institutions nation-wide. KEDI is responsible for planning and managing the actual evaluation, since it has accumulated research on institutional accreditation and evaluation. The Commission on Evaluation for Teacher Training Institutions and a group of evaluators will facilitate the evaluation activities.

Beginning in 1998, every teacher training institution will be required by the new regulation to be evaluated or accredited by a Commission established by the government every five years. Thus, the evaluation project for teacher training institutions is expected to be ongoing. The project is scheduled to evaluate the colleges of education in 1998, graduate schools of education in 1999, teachers colleges in 2000, and so forth. Thus, at the moment, research and planning to prepare this massive project has begun. The first manual for the evaluation of the colleges of education in 1998 will be published in a few months.

This project is related to the research priority, mentioned earlier, for reforming teacher pre-service training, in particular, the establishment of an evaluation system for teacher training institutions in order to promote competition among them. The assumption behind this requirement is that competition among institutions promotes a higher quality of teacher education. Every institution is supposed to work hard to meet the standards especially since financial support and further administrative action will depend on evaluation results. These efforts are expected to raise the quality of education at teacher training institutions.

(b) National Diagnosis of Supervision and Support Services For Basic Education: The Republic of Korea's Case

This is an international collaborative study that the International Institute for Educational Planning (IIEP), established by UNESCO, initiated as one of the major research projects under the title of "Improving the Quality of Basic Education" for the period of 1996-2001. KEDI participates in the project as a Korean representative. With respect to this study, KEDI recently hosted an international

seminar on the topic of "Improving Teacher Supervision and Support Services for Basic Education in Asia" held 6-8, May 1997 in co-operation with the IIEP.

The purpose of this study is to diagnose the systems of supervision and support, that is, the work of Korean inspectors, supervisors, advisers, counsellors, etc. located outside the school at local, regional or central levels. The working assumption is that schools in many countries are receiving greater freedom in making decisions in fields as crucial as the curriculum, staff management or the budget. A school's ability to expand its own freedom to a greater extent is supposed to be dependent on the strength of supervision and support services. Therefore, the study intends to find innovative ways and means of organising and providing professional support for teachers.

(c) An International Comparative Study on Educational Personnel Administration Systems.

The quality of instruction directly affects a student's level of learning and, therefore, the quality of education is influenced greatly by the quality of teachers. Given this proposition, personnel administration in education focuses on providing, attaining, and facilitating good teachers with excellent teaching performance and high commitment to her or his profession. Meanwhile, implications drawn from the success of systems in other countries (mostly the developed) serve as very useful examples.

Therefore, the purpose of this study is to analyse and compare educational administration systems in other countries. In particular, the study sets out to identify and define the central aspects for the educational personnel administration system of five countries, England, Germany, Japan, China and the USA, and to investigate the strengths and weakness of each system. The elements to be investigated include teacher recruitment, selection, placement, staff development, appraisal, merit rewards, and so on. The study will thoroughly examine how these findings can be applied to the Korean situation.

(d) Policy Alternatives for Restructuring the Teacher Pre-service Training System in Korea

In 1996, the Presidential Commission on Education Reform proposed restructuring the pre-service training system for teachers, in an effort to address problems ranging from the small size of teachers colleges to the extreme over-supply of secondary school teachers. In particular, the Commission discussed the possibility of consolidation among teacher pre-service training institutions, a provision for collaborative programs or courses at two or more institutions, and so forth.

Given the circumstances, this study intends to examine the strengths and weaknesses and the possibility of implementation for each alternative. The best alternative might differ according to the area, the distance of the institutions, the historical background of institutions, and the teacher demand in the area. For the purpose of this study, a nation-wide survey and interviews are to be conducted. Not only the general direction but also policy alternative(s) for restructuring the system are to be proposed. In addition, policy alternative(s) for particular areas are to be discussed.

(e) A Study of Strategies to Improve Korean Teacher Organisations

Recently, employment relations in education have become an important issue in the general trend of restructuring the management-labour relations in Korea. The Korean Federation of Teachers' Associations has been recognised as a legitimate teacher organisation since 1947. However, in the strictest sense, this organisation, as a professional association, did not have legal authority for

collective bargaining to improve teachers' employment conditions. In 1989, another teacher organisation whose characteristics are definitely similar to labour unions was formed, and this resulted in painful lay-offs for many teachers who had participated in illegal activities since the government had prohibited such activities. The struggle between teacher organisations and the government and among related organisations and the disputes regarding teacher organisations' roles and activities are still continuing.

Therefore, the study intends to propose strategies for improving Korean teacher organisations. In particular, the study will examine the issue of desirable characteristics for teacher organisations, that is, teachers organisation as union, professional association, or a combination of the two. The issue of the legal recognition and the span of activities of teacher organisations will also be examined. The content of the study includes an examination of the present situation and the problems of Korean teacher organisations, an overview of teacher organisations in other countries such as England, France, Germany, Japan, and the USA, and a careful perusal of recommendations from international organisations such as ILO, UNESCO, EI, and OECD.

Sri Lanka

Introduction

Sri Lanka is a tropical island in the Indian Ocean situated close to the south coast of India. Its latitude is about 6° north and the longitude is about 80° East. The land area is about 65,000 km^2. The population is about 18.3 millions and the growth rate is 1.2%.

The ethnic composition in percentages is: 74 Sinhalese; 12.6 Sri Lankan Tamil; 7.1 Moors and Malays; 5.5 Tamils of Indian origin; 0.8 others such as Burghers. The religious composition in percentages is: 69.3 Buddhists; 15.5 Hindus; 7.5 Catholics and Christians; 7.6 Muslims; 0.1 of other faiths. The geographic distribution of the population in percentages is 72 rural; 21 urban; 7 living in the plantation areas. Sri Lanka is predominantly an agricultural country whose export income is mainly from tea, rubber and coconut. The nominal GDP per capita was USD 600 in 1993 and stands now at USD 760.

General Education is imparted in schools which span from Grade I to XIII. The minimum age for admission is five years. The total number of schools for general education is about 10,700. The total pupil enrolment is about 4.2 million. The genders are equally represented in the school population, with more girls tending to stay longer in school. About 30 percent of an age cohort which entered school more than a decade ago have dropped out of school by the time they enter the collegiate level, *i.e.* the last two-year stage.

The pupils in general education may appear for two public examinations. These are: the General Certificate of Education (Ordinary-Level) at the end of Grade XI and the General Certificate of Education (Advanced-Level) at the end of Grade XIII. Pupils are provided with text-books free of cost up to the GCE O-Level. Every pupil is provided the fabric for the school uniform free of cost. These measures have had a positive impact on school participation rates.

Teachers and Teacher Education

The teacher population is about 187,000. The overall pupil-teacher ratio (PTR) is 24.1. The distribution among the two national language media of *Sinhala* and *Tamil*, and among the stages within the schools are not uniform. Compared with the international average of 34.1, the Sinhala medium classes are generally better endowed with teachers whilst the Tamil medium Primary stage is deficient. Annex 1 gives the PTR distribution across the media and stages of school according to the 1993 census.

There are deficiencies of teachers for the teaching of Mathematics, Science and English in both media. The shortages vary according to geographic location. In order to address the imbalances in relation to the media, stages and subjects, the Government has taken action to appoint about 5500 teachers. This will no doubt result in a better distributed supply of teachers. However, easing the chronic shortage of teachers in Tamil medium schools and in areas where the schools do not produce adequate numbers of school leavers who have the basic qualification for being recruited as teachers will take many years.

Teacher salaries were increased significantly in the recent past. The salaries now account for more than 95 percent of the general education budget. Hence pupil-teacher ratios are a critical element in resource allocation. Further, the inequitable distribution of staff can have a detrimental effect on the

overall quality of education. Therefore it is essential that teacher recruitment and teacher education must be directly linked to teacher demand and deployment.

In recent years new recruitment has been massive. During the last decade more than 45,000 wee recruited and deployed in schools with a few weeks of orientation. This backlog of untrained teachers was steadily cleared to a significant extent within the past few years through Distance Education. It is estimated that the entire backlog will be cleared by the year 2000. The effectiveness of this process of teacher education is yet to be evaluated. The indications are that the lack of direct supervision by teacher educators and specific opportunities that are afforded by institutionalised and residential teacher education has produced mixed results.

In 1989, 62 percent of the teachers were female, rising to 68 percent by 1994. Teaching is an acceptable occupation for women. Women teachers tend to be conscientious and non-disruptive. Increasing feminisation helps to mitigate rising female unemployment. However, the predominance of women also contributes to the low status of the teaching force, because they are generally more willing and amenable to accept poorer pay and career prospects. Another problem is that women tend to converge on urban centres. Close to half of the women teachers work in the more urbanised western, central and southern provinces. Women teachers far outnumber men in other urban centres.

Underlying Principles

There are significant issues relating to the occupation related development and the standards of the conduct and practice of teachers. They should be addressed through a mix of policy initiatives, regulation, structural reforms and teacher education coupled with improvements in management and resourcing. The following principles underlying reforms have been identified.

1. *Efficient Teacher Deployment:* The implementation of system-wide and cost-effective teacher deployment policies is fundamental to budget control and to the equitable distribution of available resources on a national basis.
2. *Quality of Education:* The level of professional competence and confidence of teachers, and their quality orientation are directly related to the quality of teaching and learning in schools. Teacher education has a fundamental contribution to make in developing and sustaining these critical aspects, through both initial training and continuing education programmes.
3. *System-wide Efficiency:* The teacher education sub-sector of the education system has a public responsibility to help maximise the use of available national resources. Features such as the size and location of institutions, length of programmes, level of specialisation, extent of duplication, and modes of delivery are of crucial importance in determining system-wide efficiency.
4. *Cost-effectiveness within institutions:* Teacher education institutions have to balance their contribution to quality and efficiency to achieve cost-effectiveness in their operation. Controlling of staffing levels, operating residential facilities, management strategies and budgetary controls etc. have a significant impact on unit costs.
5. *Rationalisation and Standardisation of Institutional arrangements:* Resources for teacher education have to be determined in a national context. In this regard key targets for rationalisation are programmes, staff and facilities. Standardisation is a much neglected aspect of institutional arrangements. It must be seen as an inseparable twin to rationalisation.
6. *Co-ordination of Institutions:* Teacher education must be co-ordinated on a national basis. A national body is required to give advice on policies and strategies for giving effect to an

integrated national effort for teacher education, and to monitor the operation, responsiveness and effectiveness of institutional arrangements.

7. *Assessment and accreditation:* Institutional autonomy which is necessary for better management demands that programmes are assessed through peer groups and committees having representatives of stake holders, on the initiative of an accrediting agency.

New Developments

Teacher Education is being reformed and restructured to be in consonance with the introduction of a new National Education Policy. Indeed this reform and restructure is an integral aspect of implementation of policy, institution building and improvement, staff development, providing infrastructure and facilities, the design of new teacher education curricula, and the establishment of a National Authority for Teacher Education.

Institution building and improvement entails: the increase from ten to thirteen of the number of National Colleges of Education which are the main locations of pre-service teacher education and training; the establishment of three Teacher Education Institutes which are residential institutions for both residential and day programmes of a specialised nature; the establishment of eighty-seven Teacher Centres which have no or very limited residential facilities for continuing education. The provision of continuing education with particular reference to access to a periods of intensive in-service training as envisaged in the Teacher Service Minute, is essential if the teaching force is to be upgraded.

Staff development and staffing entails that provision will be made to enable teacher educators to obtain qualifications ranging from first degrees to doctorates, ensure that minimum PTR is maintained, and that appropriate selection criteria are formulated and applied consistently.

Current Concerns

The present Teacher Education programmes and their important features are summarized in Annex 2. Their curricula have been analysed and reviewed. Their weaknesses in relation to contemporary requirements, the issues connected with implementation and outcomes, and the features that are necessary in the light of the new National Education Policy have been identified. Curriculum design, and systems design and development are in progress at the National Institute of Education.

A comprehensive survey of teachers who are in service to find out the exact extent of the backlog in teacher education and to determine the training needs of the teacher population is being conducted now. This will lead to the formulation of detailed plans for implementation through appropriate institutional arrangements. Concurrently, a consistent set of standards will be formulated for the Teacher Service, the Teacher Educator Service and the Educational Administrator Service.

The National Education Policy implementation requires far reaching changes in the school curriculum. This requires the reform of teacher education curricula as a precursor. In addition there is an immediate need to re-orient the teachers who are presently serving in schools to prepare them for the phased introduction of the new school curriculum at five entry points in the schools. These entry points are Grade I, Grade VI, Grade IX, Grade X and Grade XII.

Comments on Research and Development

There are a number issues and contexts which require on-going research and development efforts. The curriculum cycle that will be put into operation with the new education policy also requires policy research and field studies aimed at the fine-tuning of the ongoing policy and the formulation of new policy proposals for the next cycle.

Research and Development have to be directed towards the improvement of effectiveness and efficiency of instruction in educationally disadvantaged areas which are difficult to access and where the socio-economic conditions are not supportive of the formal education process. The educational goals have to be tailored to meet both the demands imposed by the environment, and also the aspirations and personal development needs of individual children. Small schools and schools serving minorities who have been educationally disadvantaged for generations need special attention.

Every country and groups within them have conditionalities that determine how children respond to educational interventions. The growth and progress of each child and how each responds to the environment are not determined purely by genetic factors. As such every nation must evolve its own models of education. Its educationists must do their own investigations into the education in all its aspects and develop valid insights. These are necessary inputs to policy formulation and decisionmaking.

In Sri Lanka we intend to strike a balance between investigation and academic research. At present academic research dominates the education research scene. The education system and its units are administered with questionnaires which enable data to be gathered and processed conveniently. There is an appearance of broad coverage. Statistical analysis and graphical representations of quantitative deductions seldom fail to impress audiences. Whether growing human minds and bodies and interactions between human beings which affect all those who interact can be really investigated through such research methods is doubtful.

In Retrospect

Systematic curriculum design and development of delivery systems by experts well versed in education research methodology have failed to produce anticipated improvements in the outcomes of education. Examination results, social indicators which reflect the refinement and general competence of the people, and economic achievement which is a reflection of the level of technical competence, do not match the expectations of the educationists.

Student:Teacher Ratios – 1993 — Annex 1

Based on the 1993 census, the overall STR was 24.1 (or 22.6 with the inclusion of non teaching positions in the teaching service). The breakdown by cycle and medium of instruction was as follows:

Cycle	Sinhala	Tamil	Total
Primary	26.4	37.3	28.7
Secondary	21.2	27.1	22.2
Collegiate	13.3	16.1	13.7
Total	**22.6**	**31.1**	**24.1**

PROGRAMMES PROVIDING FOR TEACHER EDUCATION IN SRI LANKA

Annex - 2

(Over the past 15 years)

Institution	Programme	Medium	Entry Qualification.	Duration	Model	Centres	Assessment	1994 Intake
Graduate Programmes (In-service)								
University of Colombo	PGDE (WE)	S	Degree	1yr 4 m	Part/Face to Face	4	Final	1,100
	PGDE (FT)	S/T	Degree + 3yrs	1yr	Full Time	1	Final	250
	PGDE (Engl)	E	Degree	1yr	Full Time	1	Final	15
University of Peradeniya	PGDE (WE)	S	Degree	1yr 4 m	Part/Face to Face	1	Final	454
	PGDE (FT)	S	Degree + 3yr	1yr	Full Time	1	Final	118
Open University	PGDE	S/T	Degree	1yr	Distance	24	Part I & II	1,519
University of Jaffna	PGDE (FT)	T	Degree + 3yr	1yr	Full Time	1	Final	75
National Institute of Education	PGDE	S/T	Degree	1yr	Distance	45	Part I & II	2,513
Non-Graduate (In-service)								
Training Colleges	Certificate	S/T	GCE (O-L)	2 yr	Full Time	16	Final+Cont.	1,077
National Institutue of Education	Certificate	S/T	GCE (O-L)	3 yr	Distance	250	Final+Cont.	3,090
	B.Ed..	S/T	CT	3 yr	Part/Contact	9		1,438
Open University	B.Ed.	S/T	CT	3 yr	Distance/Contact	1	-	-
Pre-service								
Colleges of Education	Diploma	S/T	GCE (A-L) 3 subjects	2 +1 yr	Full Time	9	Final+Cont.	1,547
University of Colombo	B.Ed.	S	GCE (A-L)	4 yr	Full Time	1	Final	Discontinued after 1982

PGDE	-	Postgraduate Diploma in Education	B.Ed.	-	Bachelor of Education
T	-	Tamil	FT	-	Full Time
S	-	Sinhala	WS	-	Week End
E	-	English	CT	-	Teachers Certificate

Thailand

I. Teacher Education : Changes and Problems

Universalisation programs during the Second and Third National Education Development Plans (1967-1979) had brought about the demand for primary and secondary teachers. Thus the number of teacher training colleges had been extensively increased to render an easier access to rural dwellers, that is, to establish one college for every two provinces. At that time the total number of provinces was 72, so there were altogether 36 teacher training colleges. However, the supply of education could not meet with the demand and the aspirations of people. Evening and weekend courses have therefore rocketed.

During the same period, three regional universities and two open admission universities (one in Bangkok and the other in Bangkok periphery) were also established. The supply of higher education had been fully taken resulting in increased enrollment and graduates in teacher education later on.

Since it takes roughly 16 years to complete the educational cycle or to produce a qualified teaching force and coupled with the system's failure to detect in equilibrium in the labor market, Thailand is challenged with a teacher surplus and an unqualified teaching force as a result of crash courses. This inevitably has a negative effect on primary and secondary education.

In an attempt to solve the over supply of teachers, teacher training colleges clarified their roles and repositioned themselves accordingly. They now offer science and arts programs and play down teacher education. Hence, they now become Rajabhat Institutes as proclaimed in Rajabhat Institute Act 1995 which allows the institutes to render education in various areas and to offer graduate courses.

Problems in Teacher Education

1. Teacher education is offered by various agencies based on their preparedness. This is due to the lack of clear production plan. Some institutions do not conform to production policy emphasizing teacher study at degree level while decreasing the production at below degree levels.

2. The lack of coordinating mechanisms between various producers and employers of teacher education graduates results in overall and subject imbalance between supply and demand. Areas that are still in short of supply are mathematics and science, in particular, physics and chemistry.

3. Budget allocation to teacher education is inadequate and has not been earmarked towards shortage areas and quality improvement especially in the context of technological and information society. The concept regarding management techniques for teaching institutions to generate income and foster financial autonomy has not been well developed.

4. In the past, teacher students were of high intelligence. But now teaching is no longer an attractive profession. People of great intelligence will not take up teacher study. Faculties ranked by choice in university entrance examination clearly substantiates this point. Teacher education or faculty of education comes near the end or the very end of the ranking. This reveals that an interest in the profession is relatively low compared to others.

Although Rajabhat Institutes are regarded as local higher education institutions suitable for female

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students in the sense of nearness to home, most students are those who fail in the national entrance examination.

5. Despite being an unpopular profession hence the lower number of feeder students, selection criteria are inappropriate in the sense that they cannot distinguish applicants who have a conviction for and positive attitudes to teaching.

6. The curriculum cannot inculcate and instill in students' capabilities and favorable teaching traits. The curriculum is imbalanced with too few practice sessions especially in the field. Teacher students end up with a lack of working experiences. Hence, each institution should redesign teaching processes and content based on its strengths.

7. Selection of lecturers tends to be content-oriented rather than personality, quality and faith in the profession. Consequently, some lack ideology and positive attitudes towards teaching. They thus fail to recognize the importance of teachers as role model for students.

8. Since the career prospect of Rajabhat Institute lecturers is not as bright as those in the Ministry of University Affairs (MUA), capable staff then tend to transfer to MUA.

New Trends and Directions in Teacher Education

1. Teacher education had long been under the sole responsibility of public institutions for security purposes. It was afraid that improper social values and unfavorable ideology might be instilled in students if the private sector was engaged in teacher preparation. However, a wind of change had calmed down the fear. The National Scheme of Education 1992, therefore, did not include a clause barring the private sector's participation in rendering teacher education.

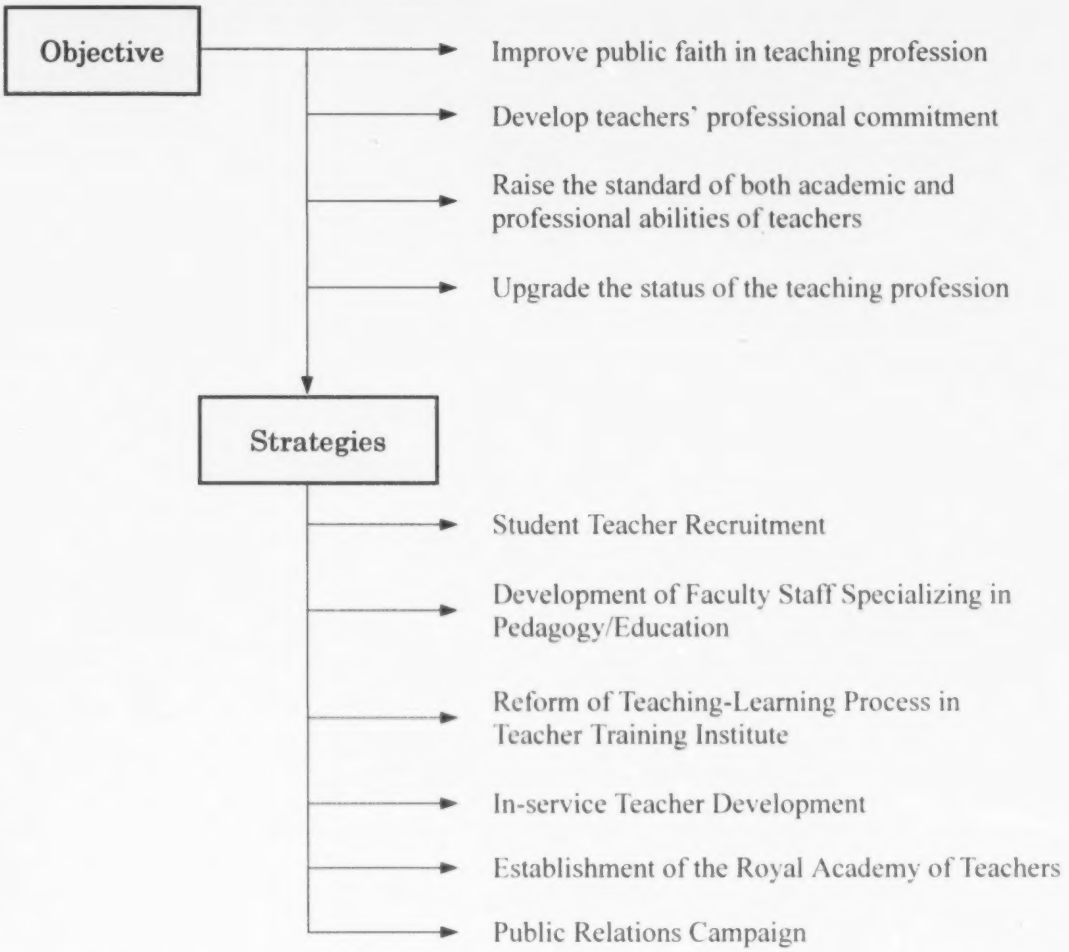
A number of private universities have applied to MUA for a license to conduct teacher education. They have been granted the opportunity in principle because public institutions have the capacity to supply the system and even over supply in some areas. It is then proposed that at the initial stage private institutions would take up teacher education only in shortage fields. They are to submit to and seek approval from MUA for the specific fields they will offer. The MUA will take charge of supervision, monitoring and evaluation to see that standards are met.

2. In view of the seriousness of the problems mentioned above, there have been concurrently many calls from all concerned to reform education. The goal is to deliver education that can strengthen people's capacity and competitive edge thus enabling them to compete with others in the era of economic liberalization and free trade.

3. Recommendations pertaining to the reform aim at teacher development as teachers are the most pivotal factor in the education process. Evaluation reports confirm that teachers' performance does not meet expectations. Unless the reform is implemented, the country at large will suffer.

The National Education Commission has thus started the teacher reform by appointing a sub-committee consisting of experts and representatives from responsible agencies. The sub-committee has prepared a report on the principles and strategies in the Reform of Teacher Education and Teaching and Educational Personnel Development which was approved by the Council of Ministers on 14 December 1994. The objectives and strategies in the Reform of Teacher Education and Teaching and Educational Personnel Development can be summarized as presented on Chart 1.

Chart 1 : Objectives and Strategies of the Reform of Teacher Education and Teaching and Educational Personnel Development


Objective
Improve public faith in teaching profession
Develop teachers' professional commitment
Raise the standard of both academic and professional abilities of teachers
Upgrade the status of the teaching profession
Strategies
Student Teacher Recruitment
Development of Faculty Staff Specializing in Pedagogy/Education
Reform of Teaching-Learning Process in Teacher Training Institute
In-service Teacher Development
Establishment of the Royal Academy of Teachers
Public Relations Campaign

Master Plan of the Teacher Reform

After the principles and strategies for the Reform of Teacher Education Teaching and Educational Personnel Development had been approved, five sub-committees were set up to work out the master plan with details of activities, goals and overall budget in relation to the teacher student recruitment, the development of faculty staff, specializing in Pedagogy/Education, the reform of the teaching-learning process in teacher training institutes, the development of in-service teacher training and public relations campaign. The master plan for the reform of teacher education and teaching and educational personnel development can be summarized as follows:

❶ **Teacher student recruitment**: to attract more candidates with a strong academic background, capability and appropriate social behavior to join the teaching profession. Prospective teacher students can be recruited from four target groups:

- Graduates of upper secondary schools in the academic stream,
- Graduates of vocational colleges,

- Bachelor degree graduates in fields other than Pedagogy/Education, and
- Specialists or outstanding professionals.

❷ Development of Faculty Staff Specializing in Pedagogy/Education Measures:

- Creation of new knowledge in teaching profession development,
- Creation of academic strength for faculty staff of pedagogy/education,
- Involvement of the local community in faculty staff development,
- Creation of systems to lend support, evaluate and provide incentives in fulfilling their duties,
- Amendment of rules, regulations and laws impeding faculty staff development, and
- Establishment of a Faculty Staff Development Fund.

❸ Reform of the Teaching-Learning Process in Teacher Training Institutes Measures:

- Improvement and development of teacher training curriculum to become diversified,
- Improvement and development of teaching practice system enabling student teachers to learn from outstanding teachers in school and community,
- Improvement and development of teaching-learning process with emphasis on the acquisition of such characteristics as broad vision and outlook and inquisitive mind,
- Acquisition, development and production of teaching-learning aids and wider use of local materials in the teaching-learning process,
- Improvement and development of measuring and evaluating methods,
- Improvement and strengthening of basic requisites for efficient teaching-learning process, and
- Creation and development of learning networks for the special purpose of strengthening teacher training.

❹ In-service Teacher Development Measures :

- Establishment of a body entrusted with the tasks of supervising policy implementation, designating the main system, sub-systems and modules for the development of in-service teachers and educational personnel,
- Designation of centres to be responsible for the development of in-service teachers and educational personnel, and the conducting of research work to improve the teaching-learning process,
- Provision of continuous training for in-service teachers and educational personnel,
- Creation of a system to provide incentives and inspirations conducive to increased efficiency in the teaching profession,
- Creation of an efficient system to oversee, follow and evaluate performance of in-service teachers and educational personnel,

- Development of educational administration and personnel, and
- Development of educational innovations, technologies and media.

❺ Establishment of the Royal Academy of Teachers.

The Royal Academy of Teachers will be a professional body created through legislation. It is a non-governmental unit enjoying the status of a legal entity with a subsidy from the government. Its main responsibilities will be to enhance the prestige and dignity of the teaching profession and to protect the teachers' interest.

II. Research and Development Concerning Teachers and Teacher Education in Thailand.

To implement teacher education reform plans, Thai Teacher Education Institutes have laid out plans and operational strategies of research and development in the 5-year period of the eighth National Education Development Plan (1997 - 2001) in 8 areas.

1. Research in Teacher Production and Utilization This kind of research aims at estimating the future needs of teachers as well as to develop a mechanism to solve the problem of teachers shortage in some areas and over supply of teachers in other areas.

2. Research in Teaching and Learning Development Examples are research and development of the teaching-learning process with learners at the center, and a classroom-action research for the promotion of teachers' initiatives and experiments for models, methods and techniques of teaching - learning process as well as internship programs and teaching aids invention.

3. Research and Development in System of In-service Teacher Education Program This includes a survey of teachers' and schools' needs for academic development, research and development of mechanisms for the development of teachers' knowledge starting from process, planning, public relations, facilities as well as rewards for the utilization of acquired knowledge in schools and classrooms in order to obtain an effective model for in-service teacher development.

4. Research and Development in Systems of Teaching and Performance Assessment of Teachers This includes the study of teachers' work load and appropriate classroom management for the formulation of standards and criteria for suitable teaching forces to achieve high quality education. Information technology and distant learning equipment are also taken into consideration to promote learning and teaching, adjustment of teaching learning systems and processes to be varied and flexible in accordance with the situation and learners' potentiality, research and development of indicators and instruments for evaluating the quality of teaching-learning, quality inspection, ranking and teacher professional certification.

5. Research and Development in Teacher Recruitment in Order to Attract High Potential Prospective Teachers This is to find instruments for screening and testing prospective teachers such as Teacher Aptitude Test, Trait and Personality Assessment Form, Interest, Commitment and Dedication to Teaching Profession Form. It also includes research on the employment status of teachers college graduates.

6. Research to Promote High Standard of Teaching Profession This includes research and

development in the teaching profession in many areas such as the development of a teaching profession standard organization, teacher licensing, development of high moral and ethical practice of teachers to the acceptable levels of the society, development of assessment criteria for directing and controlling teaching performance, and teacher welfare organization both in Thailand and foreign countries.

7. Research in Evaluation and Assessment Process of Teacher College Graduates This is to develop mechanisms and systems to assess the quality of teachers college graduates to meet the criteria and cover graduates' competency in 3 areas, such as, intelligence, skills and personality by developing indicators to evaluate learning programs, exit assessment just before graduation, and following-up the graduates by using various approaches. Information obtained will be used in developing the teaching-learning process. Qualifications and teaching performance of teachers could also be assessed in order to improve teaching - learning performance.

8. Research and Development for the Induction of New Teachers This research aims at following-up and controlling new teachers' behavior. It will include role, function, awareness of teachers as well as commitment to teaching profession. Teaching-learning situations include curriculum analysis, lesson planning, production and utilization of teaching aids, learning psychology, and evaluation. This is to study factors and conditions affecting the effective teaching life of teachers.

III. Research Activities of the Office of The National Education Commission. (ONEC)

The ONEC has conducted two research projects on teachers and teacher education namely the Efficiency of Teacher Utilization and the Evaluation Research of the Seventh National Education Development Plan (1992-1996): Teachers and Educational Personnel.

The objectives of the research on the Efficiency of Teacher Utilization were to explore the policy on Teacher Utilization by using both quantitative methodology for macro level data and qualitative approach (multi-case studies) for micro level data.

The evaluation research of the Seventh National Education Development Plan: Teachers and Educational Personnel put an emphasis on 1) process evaluation of the teachers' education reform, the development of in-service teachers and teaching professionalism, 2) output evaluation, both quantitatively and qualitatively, and 3) impact evaluation on the students, learning achievement and the quality of work life.

With the responsibilities for managing and following up of the operations in order that the master plan for the teacher education reform can be actually implemented, in 1998 the ONEC has planned to conduct 2 research and development projects. First, the documentary research which is involved in innovation, coordination, participation, decentralization and accountability to form the conceptual model for the research and development on the New Paradigm of Thai Context in Teacher Education. Second, the ONEC seeks to identify accomplished teachers, by doing the research and development on Professional Teaching Standards. For example, if we have five indicators of accomplished teachers,

1. Teachers are committed to students and their learning;

2. Teachers know the subjects they teach and how to teach those subject to students;
3. Teachers are responsible for managing and monitoring student learning;
4. Teachers think systematically about their practice and learn from experience;
5. Teachers are members of learning communities;

We need to identify these characteristics in concrete by doing the research and development to explore and set accomplished teacher indicators.

U.S.P.

Background

This paper is written from the perspective of the University of the South Pacific (U.S.P.), a regional institution which serves the following 12 Pacific island nations: the Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu and Western Samoa.

The U.S.P. was established in 1968 and its initial focus was to meet perceived "manpower" training needs of the region. Training of secondary school teachers was a key need and the School of Education (now the School of Humanities) offered both sub-degree (Diploma), as well as degree programmes to meet this need.

The U.S.P. has three campuses, the main one being the Laucala Campus, in Suva, Fiji, with smaller campuses in Apia, Western Samoa (the School of Agriculture) and the recently-established (1996) Emalus Campus in Vila, Vanuatu (comprising the Law School and the Pacific Languages Unit).

Geographically, the USP covers a vast area (33 million square kilometres) of island-dotted ocean with a total population of 1.5 million people, ranging from Fiji's 800,000 to Tokelau's 1,500. Teachers or intending teachers comprise a large percentage of the 6,000 students per semester who take one or more of the distance education courses offered by a highly successful University Extension operation.

The USP's total enrolment in 1996 was 9,381 students, 58% of whom studied by distance - this figure represents a substantial increase over the 1993 total of 7,039. Female participation is 44%, varying from 19% of Solomon Islands students to 66% of the Nauruan students.

There are 150 academic staff, approximately 50% of whom are Pacific Island nationals.

The U.S.P. is mainly financed (73% in 1997) by contributions from the 12 member countries. Each country's share is calculated according to the following two criteria:

1. A General Grant, based on the average of their previous two years' student numbers.
2. A Special Grant, based on the identified economic benefits of the U.S.P. to the member country.

Private student fees (12%), aid contributions (9%) and generated income (6%) comprise the remainder of the U.S.P.'s income. The total 1997 recurrent funds budget is F$39.971 million, compared with F$2.261 million in 1971.

A University Centre has been set up in each member country and each Centre has two major functions in terms of teacher education, as it services the Extension courses and also mounts a range of Continuing Education courses and programmes, including, for example, a Pre-School Teachers' Certificate.

The U.S.P. has seven action-oriented institutes. These are autonomous sections, charged with providing mostly short-term training and advisory services, conducting research and publishing. We also compete or collaborate with Pacific rim institutions in bidding for and mounting aid-funded

projects.

The above context is crucial when examining teachers, teacher education, research activities and priorities for teacher development and teacher education research in the USP region.

The situation of teachers, and teacher education (both pre- and in-service) and their problems, issues and trends

Table One is provided as an indication of numbers involved, especially schools and teachers, in the 12 USP member countries. (Annex 1)

A very high level of commitment (motivation) characterises Pacific teachers. This is in spite of several challenges they face, including poor resourcing, a strong examination-focus and a related high student attrition rate, low salaries and lack of training.

As **Table Two** shows, referring to the 7 of the 12 countries which have teacher training institutions, an average of 10% of the primary and 24% of the high school (secondary) teachers were classified as untrained in 1995. (Annex 2)

Lack of resources is a major problem. It is not uncommon, for example, in both remote, rural schools, which rarely receive visits from education officers, as well as urban schools, to find virtually no resources - even chalk and chalkboards are in scant supply, let alone books, stationery, pens and pencils.

Also, as noted by Lingam (1996) in a Fiji survey, achieving an average national teacher-pupil ratio of 1:30 camouflages very large urban classes (50+ pupils) and also unwieldy rural multiple classes (2-3 levels in one room), which provide major challenges for teachers.

Pre-Service Teacher Education

Referring to Annex 3, seven countries have teacher training institutions, one of which, Fiji, has two government and two private institutions.

Significant features of these national institutions include

- Junior high school training programmes are comparatively recent, but do exist in 6 of the 7 countries.
- Major curriculum reviews and other development initiatives, generally externally-financed (so also partly externally-driven) are ongoing in all seven countries.
- Articulation with the regional institution, the U.S.P., is in its very early stages.
- A regional forum, the Pacific Association of Teacher Educators (PATE) provides an avenue for networking among the national Colleges. The IOE at the U.S.P. is the focal point for this Network.

The University of the South Pacific

The U.S.P. remains a major 'trainer' of upper high school and tertiary level teachers. In addition, the

U.S.P.'s role is expanding to provide leadership, professional upgrading of tertiary teachers/educators, and the transfer of expertise in the form of U.S.P. graduates. In addition, U.S.P. distance study courses are used in many national tertiary learning institutions.

The U.S.P. Diploma in Education which prepared junior secondary level teachers, ceased from 1985, but the BA/BSc plus PGCE, and the three-year BEd Secondary are still in strong demand (to 'train' senior secondary and tertiary level teachers).

In addition, a new BEd (primary) will commence in 1998, which will offer professional upgrading to primary teachers by a dual (distance and on-campus) mode, an opportunity hitherto only available to high school teachers.

The BEd Primary will offer an integrated package, combining content upgrading (disciplines) with pedagogical considerations. Students will also develop basic skills to conduct research and reflect critically on their practice.

In-Service Teacher Education

Substantial teacher in-servicing, particularly through bilateral and regional aid funding, is a major characteristic of the Pacific teacher education scenario. In some ways this could be regarded as a mixed blessing - while benefits are accruing, teachers are not necessarily gaining qualifications/recognition for their efforts. Also, some of the in-service curricula are quite strongly western driven with insufficient attention paid to the Pacific learning-teaching milieu.

A major regional Project, involving substantial in-servicing through the cascade, training of trainers strategy, is the UNDP/UNESCO/UNICEF/AusAID Basic Education and Life Skills (BELS) Programme (1993-2000).

'BELS', which enters its third phase in September 1997, is having considerable impact in 11 USP member countries in providing professional upgrading to primary school teachers in the following:

- basic classroom skills (e.g. planning, assessing, questioning)
- literacy education (moving from a 'one-way' approach to a more balanced approach)
- involving the community in the support of (formal) education.

Another module of BELS involves gathering of data on literacy and numeracy achievement at Classes 4 and 6 in every school in the 11 countries. This data has multiple values, a major one of which is the provision of feedback to teachers on the success or otherwise of their efforts (bearing in mind, however, the multiplicity of other variables affecting achievement).

BELS, then, is a major teacher development initiative in our region. It complements and supplements the many national initiatives.

Problems, Issues and Trends

Major problems and issues can be summarised as follows:

- Maintaining teacher quality while expanding the system (mushrooming of junior secondary

education, especially in Solomon Islands, Vanuatu and Kiribati).

- Evaluating the impact of in-servicing (research needed).
- Improving resourcing, especially providing materials to enhance basic literacy and numeracy achievement.
- Professional upgrading of teacher educators - few are trained for tertiary teaching.

Again, in summary form, we see the following three major trends in teacher education and teacher development

- Gradual improvement in entry qualifications of pre-service trainees.
- Improvement of pre-service teacher education curricula.
- Acknowledgment of the value/importance of basic education and human resource development and the 'broadening' of the concept of basic education to include values, life skills, and the achievement of students' full potential.

Recent and Present Research

There is a scarcity of educational research generally in our region, especially research by regional educators. As with other fields, researchers from outside have also shown some interest in 'researching' education in the Pacific.

There has, however, been some very significant research by senior educators, such as USP staff members pursuing their higher degrees, as well as by students at the USP or at Pacific Rim institutions involved in post-graduate studies.

Major highlights/thrusts, related to our theme of teacher development, with key researchers' names in parentheses include

- Cultural considerations - teachers' perceptions/valued contexts as identified among Tongan teachers and implications for pedagogy. (Helu-Thaman)
- Curriculum implementation and teachers' professional development needs (Benson/Singh/Muralidhar).
- School Leadership Challenges - Effects on Quality (Tora, Qovu).
- Development of Teacher Quality/Attrition/Stress Factors (Teaero, Prasad)

Cultural Considerations

Thomas and Postlewhaite (1984:25) noted the vast difference between the western education system introduced into the Pacific in the 19th Century and traditional, daily-life education. Helu-Thaman has pursued this issue over the past decade, including in her doctoral thesis (1988).

A focus on the need to review Pacific education in the light of cultural considerations is made more timely in view of the UN's *Decade of Culture* (1987-1997). Helu-Thaman found that Tongan teachers' valued contexts of thinking had significant implications for teacher education. In her doctoral study (1988), Helu-Thaman analysed Tongan language of education, conducted interviews and studied

Tongan teachers' role perceptions and from this she identified the following valued contexts which Tongans generally emphasised:

- The supernatural (spiritual)
- concrete situations
- formal conformity
- respect for rank and authority
- kinship relationships
- `ofa (love/compassion)
- restraint behaviour

Each of the above had strong implications for education in Tonga and, as several of her fellow Pacific educators have subsequently confirmed, can to an extent be generalised to other Pacific societies/countries.

Some of the implications, especially those relating to teacher education and teacher development are:

- **General**: There is a general conflict between traditional, Tongan education and introduced (some say imposed) western education so that if we regard the main goal of formal education as socialising students for a particular society, then introduced schooling can be seen as doing the opposite of this.

- Emphases on formal conformity and on respect for rank and authority can be seen as helping to sustain Tongan culture (and were identified as such by Helu-Thaman's informants) which are in contrast to western encouragement (in pedagogy and curriculum design) of individualism and democratic rights. A Tongan teacher thus understands her students' reluctance to be seen to stand out individually and to strive for personal achievement, but can be confused when exhorted to emphasise individualism when studying education courses at pre-service level and in in-service courses, especially those conducted by consultants not sensitised to cultural factors.

- Emphasis on restraint behaviour can also be linked to that on formal conformity – "speaking out", "participating actively", strongly advocated again in education theory, can be viewed negatively (*fie poto*, or wanting to be 'over-smart') by fellow students and teachers alike in Tongan and in other Pacific countries' classrooms. This emphasis, Helu-Thaman points out, also strongly brings into question the appropriateness of adopting (without questioning them) inquiry-based modes of instruction.

- ***`Ofa***: Teachers often quoted *`ofa* as the 'most important characteristic of a good teacher' (Helu-Thaman, 1991, P.9).

This reference to her doctoral research findings in a later paper, is highly significant in terms of re-assessing the curriculum of teacher education both at pre- and in-service levels in the Pacific.

Looking ahead, Helu-Thaman has recommended (1990, 1997) the carrying out of similar studies to hers by educators in other Pacific countries, to find out their valued contexts of thinking. As will be seen below, this is a research priority for us and a Project is about to be launched which will lead to such an enquiry.

To end this section, one cannot do better than to cite Helu-Thaman's conclusion in a paper on developing a culturally-sensitive model of curriculum development for Pacific Island countries (Helu-Thaman, 1991, P.11):

> *'I also envisage listening attentively to our voices, as well as to our silences. In either case, a certain degree of humility and tolerance is required; after all, it did take millions of years for polyps to build our islands, but it will only take one arrogant human act to obliterate them.'*

A forthcoming UNESCO/USP project (*Pacific Cultures in the Teacher Education Curriculum*) is one of several follow-up research activities - at its core is Helu-Thaman's (1992) drawing attention to the need for consideration of (Pacific) cultural contexts of teacher education.

Pacific Learning/Teaching Style Preferences

Helu-Thaman's work notwithstanding, very little is known about Pacific students' and Pacific teachers' learning/teaching style preferences. (Although the notion of learning style is, in our view, allied to her notion of 'emphases'.) While we do not necessarily subscribe to the view that teaching method and/or curriculum materials should be totally tailored to suit such preferences, especially in multi-cultural contexts, we do believe that they should be taken into account by teacher trainers (both pre- and in-service) and curriculum developers, at the very least.

While we acknowledge that more such studies have been carried out in New Zealand among Pacific island learners there, we would also argue that the cultural contexts in the Pacific island countries are very different.

Among the few studies we are aware of are those of Hansen (1984) and Landbeck and Mugler (1994). Hansen found that Hawaiian students, presumably more westernised (our interpretation), were 'significantly more field independent than Samoan, Tongan, Fijian, Indo-Fijian and Tahitian students. The implication drawn, although only a very tentative one, is that the less westernised students would prefer to work holistically, intuitively and in groups, and would be better rote learners. (Rote learning is, interestingly, a much-criticised 'style' said to be characteristic of Pacific teaching and learning generally.)

Landbeck and Mugler (1994) interviewed a sampling of students at the University of the South Pacific. They concluded that Pacific students generally find group work extremely useful, efficient and enjoyable. As referred to above, they also noted the predominance of rote memorisation as a preferred learning style, but caution that the students' preferred learning styles may be as much influenced by the cultures of the institutions they attend, as by their source cultures.

We believe, then, that the learning style concept is a key one, involving variables which may well be affecting (both positively and otherwise) the quality of Pacific education.

Teachers and the Curriculum in Action

- *Singh, Muralidhar and Benson have all found that teachers need further development (in-servicing) for truly effective quality curriculum implementation. They focused on primary schooling, primary and high school science and junior high school English respectively.*

• Using the ethnographic approach, Singh investigated the curriculum in action in two rural primary schools in Fiji. He found that:

- curriculum in action goes well beyond the prescribed materials, as teachers perceive the national Curriculum Development Unit as only one of the reality definers. Parental expectations, school traditions and teachers' own practical wisdom present a complex situation that defies those explanations adopting a simple 'fidelity' model of curriculum implementation;
- schools tend to create an ethos that reflects the cultural background of the community they serve and therefore, in a plural society, schools show clear differences in the ethos they create for teaching and learning generally; and
- teachers' professional upgrading, through both in-service courses as well as school-based initiatives, was a matter of top priority.

• Muralidhar's doctoral research (1989) has provided invaluable information on factors, including important ones related to teacher development and teacher education, which caused "... a wide gap between the aims and intentions of the (Years 7-10: Forms 1-4 Basic Science in Fiji) programme and how those were translated into action." (Muralidhar, 1989, p.xii)

Utilising a participant-observer methodology, Muralidhar observed 289 Basic Science lessons taught by 32 different teachers in seven secondary and five primary schools in Fiji. He also interviewed teachers, curriculum advisers and other education administrators.

He examined the activities and experiences of both teachers and students, the factors influencing their work, and the perceptions and concerns of teachers and curriculum officers in relation to classroom practice.

Among teacher-related factors which Muralidhar found had a negative impact on full attainment of the curriculum goals were

- Lack of awareness of or familiarity with the overall aims and intentions of the four-year programme.
- Teachers' lack of adequate knowledge of and/or background in the subject.
- Teachers' lack of confidence to handle activity lessons and/or attitudes towards such lessons (perceived, for example, as a 'waste of time' by some, in their drive to "coach" students to gain high examination marks).
- Lack of leadership from Heads of Department.
- Heavy teaching loads and a crowded syllabus.
- Absence of in-service courses and lack of support facilities for teachers.

Muralidhar found, moreover, that 'The effect of these factors was more pronounced in primary schools than in secondary schools'. (1989, p.xiii)

Muralidhar proposed a number of ways of remedying the above problems and thus improving the learning and teaching of Basic Science, with its concomitant tremendous potential to enhance

students' life skills.

While very little follow-up has occurred, there is some hope that a major regional initiative to improve science education in Years 1 to 10 in the Pacific will soon have a small beginning. A Science Education in Pacific Schools (SEPS) Project Document has been developed at the request of 11 USP member countries and, while not included as intended under the UNDP's Sixth Inter-Country Programme funding cycle, it will commence with New Zealand funding during 1997.

• Benson (1989) in evaluating English teaching in Years 7-10 (Forms 1-4) in Fiji, found similar teacher-related problems to those identified among science teachers by Muralidhar.

Benson's study was undertaken at the request of Fiji's Ministry of Education, partly owing to criticism of the curriculum materials. The two major findings, however, were (very briefly summarised):

- The materials were basically satisfactory.
- Implementation was not.

Benson identified the following teacher/teacher-related factors which negatively impacted on the successful attainment of the English curriculum goals:

- Lack of training generally (approx. 25% of Fiji high school teachers do not have qualified teacher status and this figure is increasing) and lack of specialist training in teaching English as a Second Language (ESL).
- Lack of time and/or commitment to mark students' work - this might also reflect lack of specialist knowledge, which helps an ESL teacher to be conscious of the importance of feedback to promote ESL acquisition.
- Inability to adapt the curriculum materials to suit the teaching context (which varies widely from rural to urban and so on).

The survey thus had major implications for teacher education/development. Benson recommended a substantial in-servicing initiative to redress the perceived implementation problems. Interestingly, these findings and recommendations contradicted the pre-survey belief that the curriculum materials were the major obstacle to successful ESL learning - teaching in Grades 7-10 in Fiji.

Leadership/Quality/Development

Qovu (i:1996) cogently argues that "the principalship will increasingly represent - a potentially powerful position for effecting change in Fiji's secondary schools".

Utilising Mintzberg (1973), Qovu was a non-participant observer of four Fiji high school principals.

Significantly for school leadership not only in Fiji but in our region at least, Qovu's study "... also confirmed that the nature of the job as reflected in the work activities effectively prevented the Fiji secondary school principals from fulfilling some of the roles expected by their employer".

Qovu highlighted negative characteristics which emerged, such as

- **invisibility**: staff did not know what their principal was actually doing.

- **brevity:** the average duration of the principals' activities was 2.7 minutes.
- **variety/fragmentation**: related to brevity, the principals were only rarely able to satisfactorily complete the tasks which confronted them during the school day.

Teacher Stress

Prasad (1997) investigated teacher stress and its implications for human resource management in 27 of Fiji's 142 high schools. He found that more than half of his 150 respondents had experienced symptoms of stress. Significant such symptoms were: anxiety, exhaustion, frustration, anger, nervousness, high heart rate, depression and chronic headaches. Reported causes of the high stress experienced were:

- lack of opportunities for career development (81%)
- low salaries (66%)
- lack of recognition by authorities/lack of consultation (58%)
- poor conditions of service (56%)
- poor leadership style in school (54%)

High Attrition

We know intuitively in the Pacific that many secondary teachers move on as soon as possible, especially well-qualified teachers, to more prestigious, more "relaxing" and better paid jobs in both the public and private sector.

Teaero (1996) set out to look at an improved approach to teacher development - he felt that salaries, conditions of work and other factors needed careful consideration, as well as the offering of professional (in-service) development opportunities.

Teaero found, however, that the high attrition rate at the main government secondary school was the major problem to focus on, pushing aside the investigation of how to improve development of teachers at the school. Teachers would stay an average five years at King George V Secondary School, the main government high school in Kiribati, and then move to other professions.

Among causes of the high attrition were

- lack of status
- lack of pride/commitment generally by teachers in the school
- higher salaries offered elsewhere.

A Study of Effectiveness of Pre-Service Education

A survey of the perceptions of former students (N=250) during their beginning years as teachers was conducted by a team of staff from the Lautoka Teachers' College (L.T.C.), Fiji, between 1985 and 1991. Responses were sought on the 'usefulness' for their actual teaching of subjects, content and methods students learnt during their training. In general, the teachers found their 'preparation at the LTC to be reasonably effective' (Report: 1991:44). The teachers rated their preparation in the College

subjects in the following descending order of usefulness: Mathematics, Science, Vernacular (Fijian and Hindi), English, Education, Health, Social Science, Physical Education and Gardening. (The range of response was 84.8% for Mathematics to 53% for Gardening.) At the practical level, the findings, which necessarily have to be interpreted in the context of Fiji schools and the existing situational factors, nonetheless, provided the LTC staff with useful feedback on the effectiveness of the pre-service programme.

ACTION RESEARCH

1. Koro Action Research Project: Improving Rural Education

In the Koro Project, Jenkins and Singh (Jenkins/Singh 1996a) undertook a general investigation into schooling on Koro, an island in Fiji with six primary schools and one secondary school. The research was a team effort, involving U.S.P. staff, all teachers in the schools, as well as the Ministry of Education officials responsible for the island. The focus was on ways of improving education on Koro, and, by implication, rural education in Fiji, if not in our whole region.

The study found that Koro had a strong traditional Fijian culture and a marked allegiance to the church and its activities. Teachers integrated well with the community on Koro and were fully aware of the official requirements in terms of curriculum implementation, examinations and school organisational matters. The study also highlighted the following as key issues:

- the financing of schools
- parental support for school activities
- languages and the curriculum and
- the school management.

With regard to teacher development and classroom teaching, the study recommended

- That the primary curriculum be revised to restore balance by emphasising key concepts and ideas and to acknowledge that it has a 'foundational' role to cater both for the children who will continue schooling and for those who will remain in rural areas.
- That in view of the constraints imposed by the rural environment and multiple-class teaching in Koro schools, there be a more generous teacher-pupil ratio and provision for a rural allowance and regular in-service courses and advisory services to teachers in rural areas such as Koro.

2. Improving Multi-Grade Teaching

The Action Research approach was also used by the same researchers (1996b) to work with teachers as well as with five Lautoka Teachers' College lecturers (thus aiming at these educators' development as an integral project goal) on improving learning-teaching of multiple classes. The study recommended that the curriculum in the Teachers' College should provide adequate emphasis on both the theory and practice of composite class teaching and should familiarise all students with composite class teaching during their practicum.

3. Solomon Islands: Improving Community Support for Education

Singh (1997) is again utilising the Action Research approach to help teachers in a rural school on Guadalcanal in Solomon Islands to improve community (parental) support for education.

After conducting a series of discussions with the parents at both the village and school level and analysing the findings, the teachers agreed on the following areas for follow-up action:

- Promoting greater awareness on the theme of community support for education (CSE). The focus was to be placed equally on material help as well parental interest and guidance to aid children's learning.
- Strengthening their own knowledge and skill base in relation to CSE.
- Pursuing, as a matter of priority, the provision of adequate teaching-learning resources for the school.

Though the above initiative is on a very small scale, it does indicate the potential of Action Research to involve teachers in research and, correspondingly, develop professionally as a result of this involvement. It also has the obvious strong potential to improve the quality of basic education.

4. Work of Pacific Resources for Education and Learning (PREL)

PREL, which is a Hawai'i-based organisation assisting 10 American affiliates in the northern Pacific region, has been and is involved in 'grassroots' educational research with a strong focus on learners and teachers. In particular, their *Visions and Dreams Project*, is like Singh's work in Fiji and Solomon Islands, taking research into schools and, probably for the first time, developing teachers' research skills and their ability to reflect on their practice.

Visions and Dreams aims to improve Mathematics and Science teaching, learning and assessment. One such project, located in an outer island school in the Federated States of Micronesia, will involve both teachers and students in learning mathematics and science through community research. The project seeks to link modern schooling with traditional knowledge (of plant names and uses, for example) aiming to enhance both. By reporting on the various projects, teachers will be engaged in Action Research which will enhance their practice.

PRIORITIES FOR TEACHER DEVELOPMENT AND TEACHER EDUCATION RESEARCH

The following, while not intended to be at all definitive, is our view of at least some major priorities for teacher development and teacher education-related research in the immediate future in the U.S.P. region.

A. Teacher Development

- ***Improve pre-service curricula - incorporate new trends (e.g. whole language literacy education) and cultural considerations***

  There is substantial ongoing activity in our region in the review and revision of pre-service teacher education. Some of this work is being conducted through aid projects, such as the Fiji

AusAID Basic Education Management and Teacher Upgrading Project (BEMTUP), 1996-2000. This Project involves a major review and revision of the primary pre-service programme offered by the Lautoka Teachers' College. At the same time, BEMTUP involves a major in-service initiative targeting grade 7-8 teachers and delivering a package aimed at improving their ability to teach the core 'academic' subjects, namely English, Social Science, Mathematics and Science. The Project aims to substantially improve the quality of learning and teaching of these subjects through teacher development.

Solomon Islands (AusAID) and Kiribati (NZODA) primary teacher education curricula are also under major reviews, again as components of broader educational development initiatives.

In Tuvalu, as part of an Education for Life (EFL) project, major in-servicing of upper primary and junior secondary level teachers is being carried out under an AusAID project.

- ***The BELS Programme***

  The Basic Education and Life Skills (BELS) Programme (1993-2001) involves major priorities both for teacher development and teacher education research.

  Its next Phase (Phase Three) will see developments in literacy education methodology and in ways of enhancing community support for education introduced into pre-service curricula, as well as further included in primary teachers' repertoire of skills/knowledge in the 11 participating countries. Improving on the cascade model, utilising lessons learnt from Phases One and Two, will ensure improvements in the substantial amount of teacher development aimed at by the programme.

  A major priority is to continue improving the quality of basic, formal (Grades 1-4) education through teacher development.

- ***Raise status as a result of improved qualifications and conditions of service improve educational quality***

  A priority in every Pacific country is to gradually improve the quality of its teaching force (at all levels from pre-school to tertiary level).

  This will be accompanied by gradual improvement of salaries and other conditions of service.

- ***Focus on all three areas: pre-school, primary and secondary schooling***

  Pacific countries face a similar constraint to that facing most other countries, whether deemed 'developing' or 'developed'. The problem is to spread attention across all levels of the system - while a project might enhance junior high school (grades 7-10) education, as is occurring in Kiribati and Tuvalu, for example, this may negatively impact on primary (elementary) education, as the 'best' primary teachers are brought into junior secondary level.

  We are currently preparing a primary teacher development project for Kiribati to redress this backwash effect, for a group of untrained school leaver (grade 13 level education) primary teachers.

Improvement of Early Childhood Education has also been prioritised - its addition to the BELS Programme's Third Phase is indicative of senior educational administrators' prioritisation of this area, hitherto largely catered for by non-government organisations.

- ***Development of (all) teachers' research (action) skills/capacities***

Singh's work in Fiji and Solomon Islands is a very promising beginning. We expect this to mushroom in our region in the next decade.

B. Teacher Education Research

- ***Culture and the (Pacific) Teacher Education Curriculum***

As indicated above, this is a major priority area in our region. It is expected to impact on all levels of pre-service teacher education in particular. A new project in this area, involving senior teaching training college staff as researchers, will be launched at a July 1997 consultation of Pacific teacher training college principals.

- ***Pacific students' learning and Pacific teachers' teaching styles***

As noted earlier, we regard this as an important area of future research.

Indeed, the 1995 meeting of Pacific teacher educators had already prioritised this area (Report: 1995:5), but it has not yet been followed up on.

As already noted, we regard research into students' learning styles as a priority area of need. Very little is currently known about this variable.

Similarly, little is known of Pacific teachers' **preferred teaching styles** and to the best of these writers' knowledge, there has yet to be research into this important dimension. We would claim that some teaching styles advocated in both pre- and in-service teacher education in our region is in conflict with Pacific teachers' cultural bases and hence inappropriate for them, or, if appropriate, the pedagogy needs more careful "teaching" to take Pacific teachers' cultural backgrounds into account. (I have for example witnessed a student teacher forcing rural Indo-Fijian students into male-female groups for group discussion, since modern pedagogy highlights its value - the students were silent, many looking down to the floor, owing to cultural constraints which virtually forbid adolescent boy-girl verbal interaction - of course normal adolescent shyness may also have been a factor! Hindi movies, however, are rapidly eroding such taboos, for good or bad, and if I revisited the same school today I may well find the learners more than eager to engage in mixed group discussions (whether entirely focused on the overt curriculum or not I could not guarantee.)

- ***Impact/Evaluation studies of***

  - ***Pre-service programmes***
  - ***In-service training programmes, packages and courses***

Again, there has been very little research into the perceived effectiveness or otherwise of pre-service teacher education programmes.

We are aware of only two such studies in recent years - one in Fiji (1991) - a review of the Lautoka Teachers' College and in Tonga (1993). Both made promising beginnings in evaluating the pre-service curricula, and both involved interviewing graduates of the institutions.

The 1995 teacher training college principals' consultation also prioritised this area but it has yet to be pursued.

Similarly, there is an urgent need to study the effectiveness and/or impact of in-service courses and programmes. Such research will be conducted during BELS Phase Three.

- ***Teacher Studies: "At Risk" Teachers (PREL)***

  Following valuable research into factors causing **students** to be at risk of failing to benefit to their maximum potential from schooling opportunities available to them (Kawakami: 1995), PREL has prioritised a Pacific study of factors placing **teachers** "at risk". Some guidance is already available from mainland American research into the same area, but Pacific teachers' situation will involve some significant differences, owing to the very different socio-cultural context in which they operate. Helu-Thaman's work (1988) has already shown how Tongan teachers' perceptions of their roles are at variance with the 'western' educational context.

- ***PILL test results - why some teachers are performing better than others***

  The BELS Programme PILL data opens up a host of potentially valuable research opportunities. One of these will be to attempt to identify relevant teacher characteristics which affect students' achievement (acknowledging, of course, that a complex array of variables are involved, and that teacher-related variables are only a part of the picture, albeit an important component.)

  The considerable literature on the "good" second language teacher, for example, does not include Pacific studies, as far as we are aware.

- ***Research in Tertiary Teaching and Learning to Inform and Improve Practice: Practice is Value-Belief Driven***

  The USP is about to introduce a tertiary teaching qualification designed to improve learning and teaching by its staff, as well as, in due course, staff of tertiary teaching institutions in the region.

  An *Action-Learning Project* paper, involving research into aspects of lecturers' own teaching, will form the final Module of this qualification. It is hoped that such research will not only improve reflection on practice and practice within the institutions, but also remedy our dearth of knowledge of many key aspects of teaching and learning in the Pacific.

  In this regard, we are liaising with the Tertiary Education Institute of Griffith University in Queensland, Australia, where, we are told, competition to secure funding for staff research projects is very strong, in contrast to our own situation, where virtually no research has yet been undertaken internally to tell us more about the effectiveness/quality of our own teaching.

Conclusion

We thus have a quite daunting research agenda, which can be viewed both positively and negatively. The positive side is that there is great potential to improve teacher education in the light of the results of the research outlined above.

The negative aspect is that a great amount of work needs to be carried out, despite the very limited number of experienced 'local' researchers in our region.

The U.S.P. will thus have a crucial role, already begun by Helu-Thaman, Singh, Jenkins and others in developing research expertise - the growing number of post-graduate students in education and psychology is also a positive development.

We will also of course welcome collaboration especially with our Asia-Pacific colleagues, whose expertise and experience can no doubt dovetail with ours for mutual benefits.

Thank you for your attention.

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Table One **Annex 1**

	COOK ISLANDS	FIJI	KIRIBATI	MARSHALL ISLANDS	NAURU	NIUE	SOLOMON ISLANDS	TOKELAU	TONGA	TUVALU	VANUATU	W. SAMOA
Population	19,000	750,000	72,298	55,000	9,000	2,100	300,000	1,500	96,000	9,500	140,154	162,000
Primary Schools	22	700	92	102	12	1	522	3 (p&s)	155	9	372	151
Teachers	170	4,421	522	547	150	17	2,559	45 (p&s)	766	73	1,460	1,476
Students	2,886	145,630	16,316	13,080	2,000	346	72,378	465 (p&s)	16,253	1,676	35,132	35,462
Secondary Schools	14	142	16	10	2	1	23		39	2	25	42
Teachers	180	3,430	179	120	40	25	440		809	30	298	696
Students	2,019	60,237	2,933	2,215	618	350	6,666		16,000	550	5,155	12,537

Table Two: Teachers and Their Training **Annex2**

COUNTRY										
	Male	Female	Total	% Untrained	No. of Schools	Male	Female	Total	% Untrained	No. of Schools
Cook Islands	35	135	170	9.4	22	75	105	180	20	14
Fiji	2,363	2,758	4,921	0.5	700	1,898	1,532	3,430	24	142
Kiribati	223	299	522	9	92	100	79	179	42	16
Solomon Islands	823	1,736	2,559	21	522	322	118	440	-	23
Tonga	234	467	701	-	115	433	376	809	30	39
Vanuatu	490	970	1,460	20.8	372	-	-	298	18	32
Western Samoa	416	1,060	1,476	7.7	151	385	311	696	39	42
Totals	4,584	7,425	11,809	Av = 11.4	1974	3,213	2,521	6,032	Av = 28.8	308

Source: Benson 1995. *Pacific Teachers and Their Training (UNESCO)*

Annex3

	Teacher Training Institutions
COOK ISLANDS	Cook Islands Teachers' College
FIJI	Primary - Lautoka Teachers' College (Govt) - Corpus Christi T.C. (Catholic) - Fulton Missionary College (Seventh Day Adventist) Junior Secondary - Fiji College of Advanced Education
KIRIBATI	Kiribati Teachers' College
MARSHALL ISLANDS	School of Education and Cultural Studies (within Solomon Islands College of Higher Education) (Primary and Secondary)
NAURU	
NIUE	
SOLOMON ISLANDS	
TOKELAU	
TONGA	Tonga Teachers' College (Primary and Junior Secondary)
TUVALU	
VANUATU	Basic Education Training Centre
WESTERN SAMOA	Faculty of Education, National University of Samoa (Primary and Junior Secondary)

Viet Nam

I. BACKGROUND

Viet Nam is located on the eastern portion of the Indo-Chinese peninsula on the side of the East Sea. Viet Nam covers a mainland area of 330,363 sq. km and a system of archipelagos in the East Sea. Currently about 77 million live in this area, which is made up of 61 provinces and nearly 80% of the population live in rural and remote areas.

The anti-illiteracy campaign has been carries out since the beginning of the independence year – 1945. Now the literacy rate is about 92,5%. The universalisation of Primary Education Law (UPE Law) was announced and implemented at the end of 1991. Opportunity for learning, of going to school is equal for all children. However until now there is only 51% of children (to 18 years old) is mobilized to go to school. The educational system of Viet Nam comprises 12 years general education plus from 2-6 years of higher education.

3	5	+	4	+	3	2-6
Kindergarten (3-6 years old)	Primary Education (6-11 years old)		Lower Secondary Education (12-16 years old)		Upper Secondary Education (17-19 years old)	Higher Education

Since the implementation of the UPE Law the school enrolment is increasing. On the one hand, due to the equal opportunity for all children to go to school, on the other hand, due to the population, the growth rate of our country is still high – 2,1%. In comparison with the school enrolment of school-year 1991-1992 in school year 1995-1996 the enrolment of general education has increased 1.25 times and the one of higher education – 2.7 times.

Total Labour force of Viet Nam is 40,251,000 persons (comprised 19,254,000 men and 20,297,100 women). By the year 2000 the labour force may be 48 million.

The distribution of the labour force in 1995 was:

- Sector of industry and construction 28%
- Sector of service 38%
- Sector of agro-sylviculture 34%

These rates will be modified and reorientated. An effort in redistribution of labour force by the year 2000 to strengthen the process of industralisation is to change these rates, adequately, into 35% for industry and construction sector, 45% for service sector and diminish the labour force for agro-sylviculture sector, which would occupied only 20%.

The Information Technology is included in all major aspects of our Viet Namese society, particularly, from the end of the 1980s. The Information and Computer Training for Teachers is now an urgent problem of Education, to meet the demand for our new man-power needs.

In the period of transition ĐỔI MỚI to the Industrialisation and Modernisation has arisen the new

concept of a Whole Developed Personality. It requires be more than before abilities, including Informatics and Computer monitoring skills, foreign languages, social activities implementation, dynamic and flexibility, moral and positive ambition.

It is reflected in the process of formation and development of student's personality, i.e. in the learning-teaching process, the integration, the out-door activities, etc.; and in its turn, to the teachers' awareness and professional abilities.

II. CURRENT PROFESSIONAL SITUATION OF TEACHING STAFF

A - QUANTITY ASPECT: In the school-year 1995-1996 more than 19 million children attended school including kindergarten students. Adequately there is a great number of teaching staff (Table 1).

Table 1: Teaching Staff in School Year 1995-1996*

LEVEL	NUMBER
Pre-Primary education	129,857
Primary education	298,407
Lower secondary education	154,416
Upper secondary education	39,398
Pedagogic education	8,523
Total	630,602

(Source: MOET, 1996)

* Not including teaching staff of other higher institutions and Voc. Tech. education

The network of pedagogical institutions comprises 81 units, among which there are 10 Pedagogical Universities, 41 Teachers' Training Colleges (TTC), 36 Teachers' Training Schools (TTS) and 3 Technical Teachers' Training Colleges. On average there is at least one pedagogical unit per province. Annually there are over 8,400 teachers graduated from Pedagogical Universities and TTC and over 13,000 teachers graduated from TTS. Attention in distribution was paid to and met the demand of the difficult areas (mountainous, remote, islands, ...). Real training capacity of the network in school-year 1995-1996 was 58,040 teachers-students.

In comparison with teacher contingent which existed before the recent teaching staff in 1991 was 150 times more than that one before August Revolution 1945. However due to the rapid expansion of Primary Education we still require local 57,000 teachers.

B-QUALITY ASPECT: In the past ten years of process ĐỔI MỚI the teachers' training has been upgraded by different measures, such as:

- Implementation of new curriculum at collegiate level for Kindergarten and Primary teachers.
- Development of multilevel form in some universities and colleges that meet the demand of different level trainings at one institution.
- Consolidation and development of Post-graduate system in Pedagogical Universities.

- Implementation at the same time the pre-service training and in-service training. The in-service training was orientated by followed direction:
  + Standardisation
  + Continuing and up-date education
  + Professional development
- Synchronisation by Teaching-Learning planning and extra-activities for different discipline/subject training. Recently it lacks very much teachers on Arts, Music Physical Education and foreign languages, especially, English.
- Integration of scientific research in process of training.
- Enhancement of infrastructure and facilities including teaching aids and educational subject-laboratory equipment, therefore, step by step, to renovate pedagogical environment.

*With these activities and measures our teaching staff is being standardized. Although our effort was great the under-standardized rate is still high, especially, in primary teachers (Table 2)

Table 2: Standardized Rate of Teachers in General Education

LEVEL	% STANDARDIZED
Primary Education	70.72
Lower Sec. Education	83.88
Upper Sec. Education	93.31

(Source: MOET, 1996)

Over thousand computers now were equipped for new subject "Informatics" in Secondary schools. In 1985 a million dollars was provided for equipping first schools with computers. At the end of 1992 the Project on "Including Informatics into General Education Curriculum" was launched. In-service training on Informatics for Secondary Education teachers has been organized many times. Using computers as one of the modern meanings in innovation process of Teaching-Learning method in Primary Education. Firstly 12 Primary schools are being experimented with.

III. MAIN POLICY IN DEVELOPMENT OF TEACHERS AND NIES' RESEARCH ON TEACHER EDUCATION

A-MAIN POLICY: Based on the concept "A man is an objective and at the same time a motive force of the socio-economic development process of the society", we consider that a man-power development is a fundamental element for the fast and sustainable development of the society and a human element is a decisive element for all development processes. Putting a man in the centre of development process is a creation of the basis for implementation of an internal development by a man and for a man.

As a teacher is a very important factor of a formation and development process of Student's Personality the main policy in continuing development of teachers is "Developing and Upgrading the Teacher's Qualification to meet the demands of society in training students for the transition period into an industrialisation and modernisation society is a first priority of education".

B-NATIONAL INSTITUTE FOR EDUCATIONAL SCIENCE ON TEACHER EDUCATION

1. Development of the new curricula for Teachers' Institutions (Universities, Colleges, Schools).
2. The way of integration of pre-service and in-service teachers' training for standardising and upgrading in time the teacher contingent.
3. Renovation of methods of Teaching-Learning to meet the demands of liberating all student's potential capacity.
4. The Traditional-Modern Teacher Personality.
5. Continuing Professional Development of Teachers to meet the demands of the beginning 21 Century period.

295 billion VN Dongs were used for standardising and upgrading in time pedagogical institutes, TTC and TTS from 1994.

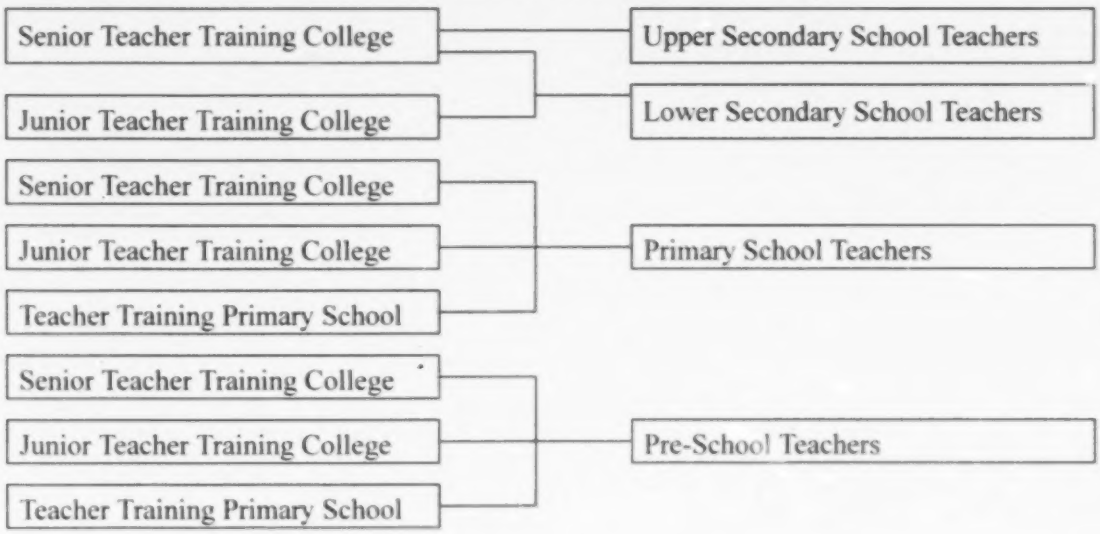
IV. RECOMMENDATIONS ON ACTIVE COLLABORATION OF RESEARCH STUDIES AND RELATE ACTIVITIES AMONG NATIONAL INSTITUTES

An on-going context of close collaboration between countries in the Asia- Pacific region is creating favorable conditions for the development of each country. The lessons of four "dragons" in Asia-Pacific region on the whole socio-economic development based on the long-term educational development remind us the key role of education. The collaboration in the field of education would make stronger each country and our common Asia-Pacific region as well.

We recommend the close bilateral or multilateral collaboration between our countries on:

1. Upgrading teachers in post-graduate education programs.
2. Exchanging experiences in in-service and pre-service training by seminars or special studies in the framework for cooperation among national institutes of educational research and development as part of the Asia-Pacific Programme of APEID.
3. Establishing two common projects/programmes on continuing education and distance education.
4. Publishing a common Newsletter on Teacher and Teacher education of Asia and Pacific region with a sponsorship of APEID.

Table 3: School Teachers' and Pre-school Teachers' Qualifications Nowadays



Appendix 2: Strengthening the Role of Teachers in a Changing World: Issues, Prospects And Priorities*

By Rupert Maclean and Ian Birch

INTRODUCTION

The role of teachers in a changing world was selected by the General Conference of UNESCO (Resolution 1.2 adopted at its twenty-seventh session) as the theme for the forty-fifth session for several important reasons. One of the main reasons is that, as the report of the International Commission on Education for the Twenty-first Century has put it, "good education requires good teachers". In addition, in terms of their sheer numbers, teachers are very important. UNESCO's World Education Report (1995) indicates that throughout the world there are 53 million teachers in primary and secondary schools alone and this number will continue to increase. Teachers make up the largest single group of trained professionals in the world.

The Council of the International Bureau of Education (IBE) has decided that the ICE should cover four major thematic issues, and so this paper has been structured accordingly. These issues are:

- The new professional profile of teaching staff and improvement of their social status;
- Pre-service and in-service training of teachers and other educational personnel;
- New information technologies and the role and functions of teachers;
- The participation of teachers in the management of educational change; partnership with other social actors.

In addition to these main thematic considerations, the following matters and guidelines have been taken into account in the preparation of this paper:

- The ICE will focus mainly on the role of teachers in the process of educational and social change. Although the working conditions of teachers are an important variable in the analysis of the teacher's role in society, this is not explicitly dealt with in any detail in this paper, since it is believed that the ICE is not the most appropriate forum for the discussion of this matter. This is being dealt with in other places, such as the ILO or the Joint ILO-UNECO Committee of Experts on the Application of the Recommendations concerning the Status of Teachers.
- The principal objective of the ICE is the promotion of policies designed to strengthen teachers' prestige and their participation in the process of educational change, and to help throw into question the current widespread scepticism regarding the capacity if teachers and other educational personnel to produce change within these systems. This paper reflects this interest and concern.

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* Document prepared as the official background paper for the forty-fifth session of the International Conference on Education (Geneva, 30 September – 5 October 1996) to assist participants in their deliberations and in the formulation of their recommendations and the Conference Declaration.

- Reference to the 'future' will be a central concern at the forty-fifth session of the ICE. 'Future' is here associated with the unpredictable, with uncertainty, and with discontinuity regarding the process of rapid change experienced by societies up to the present time and the implications for teachers and teaching. The future is not yet written and the present social actors have a strong responsibility in defining what to leave to future generations.

Amongst other matters examined, this paper relates to efforts undertaken so far in implementing the ILO/UNESCO Recommendation concerning the Status of Teachers adopted 30 years ago.

I. TEACHERS AND SOCIAL CHANGE: EMERGING CHALLENGES

The world continues to experience constant change, there being unprecedented upheavals in the political, social and economic domains. Internationalisation, globalisation, the revolution in information and communication systems and rapid, astonishing technological advances are influencing all nations and regions of the world. This is likely to continue unabated well into the 21st century. In the light of such change, countries in the regions throughout the world are undertaking a critical reassessment of their education systems. Education is seen as pivotal in dealing successfully with these changes, facilitating economic development, social cohesion, peace and tolerance.

It is clear from the information available from all regions throughout the world, and from the recently published report of the International Commission on Education for the Twenty-first Century, that the absolute priority of the global society that is emerging is education of a type that passes on both the existing stock of knowledge, skills, values and experience that has been built up over hundreds of years, while at the same time educating people in ways which enable them to participate actively in the rapidly evolving infor-technological society. Since the quality and effectiveness of any education system ultimately depends on the quality and effectiveness of teachers, one of the key issues which is attracting the attention of all countries is how best to accommodate the changing role and demands placed on teachers, which have implications for their recruitment, training, reward structure and the development of a new teacher profile.

Despite the enormous diversity that exists between countries, there are certain trends and issues which are common to and important for all or most countries. There is also a common need to manage the inevitable existing and emerging tensions as societies and education system evolve, change and develop. These overarching considerations are :

- the need to adjust to changing life cycles, where study, work and leisure will no longer occur in separate compartments but will intertwine; and where lifelong learning will be the accepted norm;
- ways of accommodating the phenomenon of globalization, with its stress on a move from focusing on national and local communities to that of a world society, and a global village where there are many areas of interdependence, including greater democratic participation;
- building on the four pillars that constitute, according to the Report of the International Commission on Education for the Twenty-first Century, the foundations of education: learning to be, learning to know, learning to do, and learning to live together, to find effective ways of ensuring that individual freedoms and the intellectual development and

creatively of everyone are achieved, without exception, while at the same time ensuring social cohesion, so that people live together in harmony and peace;

- the importance of ensuring that the benefits of development reach all groups in society;
- the importance of moral and values education (in addition to intellectual development), which involves "educating the heart as well as had", particularly at a time when individuals and nations are resorting to violence to settle their conflicts and when individuals, faced by the diversity of information and options, have to take responsible decisions.

There is a need to examine the ways in which the reform of education and the changing role of the teacher can help societies and individuals meet these types of issues and the challenges of the future. In looking at education reform, some of the most important considerations relate to the matters of : institutional reform in terms of decentralization of decision making, and the move towards providing individual institutions with greater autonomy; pedagogical reform with regard to the content of the curriculum; changes in teaching methodologies involving movements away from those that are teacher-centred towards those which encourage greater learner autonomy and independence; and difficulties encountered, such as the resistance of some teachers to change, the lack of financial resources, the difficulties of adjusting the rapid technological and social changes to a slower process of educational and psychological change.

Education systems face certain problems and challenges which need to be effectively solved and met if these systems are to continue to assume their important role in preparing mankind for life. These are:

(a) Technological revolution: all regions of the world are in the middle of a technological, scientific and information revolution which has important and far-reaching implications for what society expects of its schools, with regard to such matters as curriculum and teaching methods, and for its teachers, in terms of the knowledge, skills and understanding required of them to be effective in their work. Changes occurring, which have implications for teachers and teaching, include an openness to international cultures, global information exchange and political changes which influence the taken-for-granted understandings of the concepts of national authority, state sovereignty and security.

(b) Democratic involvement: there is a key global trend towards mores social participation in decision making, at all levels of society, due to political, economic and social factors. A greater emphasis placed on public freedom, human rights and social justice has far-reaching implications for the education process (and the demands placed on teachers) with regard to the development of global education, stressing citizenship, environmental concerns, peace, human rights and international understanding.

(c) Population growth: this is believed to be one of the most influential factors with regard to its effect on human and educational development, since the world population is expected to approach 6 billion by the end of this century. This will result in an increase in the number of children of school age who will need to receive an education through formal or non-formal modalities, which also has obvious and significant implications for teacher recruitment and training.

These changes have far-reaching implications for school and education systems. Education will to

stress flexibility and the ability to engage in lifelong learning and effective thinking, since the content of what people know will rapidly become out of date and have to be revised and "topped up". Teaching methodologies will need to emphasize inquiry, dialogue and student participation in developing knowledge, in addition to focusing on how to learn. In terms of scope, education will be required to stress lifelong education, including adult education, and the linking of formal and informal education in order to achieve sustainable education and the objective of education for all, as defined at the World Conference on Education for All in Jomtien in 1990.

In examining the role of the teacher with regard to social and educational change, some important general problem areas to be addressed:

(a) The accelerating process of change which societies are presently experiencing is provoking intense debate about the knowledge, skills and values which education should disseminate. In spite of the large diversity of situations, there are at least two common aspects to which special attention should be given:

- reading, writing and arithmetic as basic components of the capacity to access information and knowledge; and
- values and attitudes, particularly those linked with tolerance, solidarity, human rights, peace and democracy.

(b) New information technologies produce important changes in all dimensions of social and cultural life. Their impact on education is twofold: on the hand, information technologies constitute an instrument which can be of help in the learning process and in educational management; while on the other hand, the use of these technologies has become the content of teaching in itself.

(c) The new teachers of the twenty-first century will be the young persons who are now entering teacher training institutions or universities. Important questions being considered in all regions include: among what individuals does recruitment take place as regards social origin, gender, academic performance, etc., and how are they chosen to become teachers?

(d) Teachers' professional autonomy and type of management. All countries are grappling with the question as to what is the margin of autonomy granted to schools and teachers for decision making on content, teaching methods, curriculum organization, etc. What are the methods applied for teachers' performance assessment?

(e) One of the most common strategies adopted to strengthen the role of teachers is the identification and granting of moral and material incentives. These incentives, where they exist, vary somewhat between regions, a matter about which there is a paucity of comparable information.

(f) The relationship between teachers and other partners in the educational enterprise is a crucial issue relevant to an examination of educational changes presently taking place. There is a need for new types of relationship between teachers and family, community, the mass-media, enterprises, government and NGOs.

Besides the more general problems identified above, there are also some other considerations which, although very specific, are nevertheless common to all regions and which have implications for the

work of teachers. These include the implications for the work of teachers of needing to accommodate: those living in conflict zones; populations in situations of extreme poverty; women in traditional societies; learners will special needs; minorities; and refugees.

II. NEW PROFESSIONAL PROFILE OF TEACHERS AND THE IMOROVEMENT OF THEIR SOCIAL STATUS

What is required of teacher professionally?

The most notable consequence of the current and future challenges facing education in the modern world are those related to the teacher's role within a context of accelerating change with regard to the social, economic, cultural and political features of the present age. This requires a new type of education where new skills are needed by learners.

One of the best examples of this challenges is Central and Eastern Europe. The region has seen dramatic democratic changes in this decade resulting, in countries undergoing transition, in new responsibilities being assigned to teachers often unprepared to assume them, Re-evaluation of the national curriculum, the design of new national educational standards and assessment of the quality of education imply teacher involvement on a large scale, especially if these reforms are accompanied by decentralization of educational administration. These priorities demand high-quality teaching and require the professional level of the teaching staff to be raised. Teacher need a new type of motivation, as well as specialized training, if they are to comply with the new requirements whose scope is still expanding. Teacher are expected to be actively involved in these changes, to be critical in their thinking and evaluation, to generate new ideas and to participate actively in educational management.

In the Arab region, too, political economic, cultural and social factors have been seen to have led to more social participation in decision making. In the opinion of the regional experts, education has to respond to these changes in the following way: (a) promoting education emphasizing global citizenship based on new values, such as international understanding, dialogue and justice; (b) reinforcing human rights education that fosters democratic and responsible bahaviours; and (c) actualizing human development, human rights, capacity for conflict resolution, and developing positive interaction on global issues.

In the African context, the new professional profile proposes educators for the future who, by aptitude, education, training, comportment and social status, should be at ease in carrying out the following functions:

- To promote values and attitudes that would lead to the development of the community;
- To be a role model for the teaching profession in the community;
- To display expertise, knowledge and skills in their teaching;
- To assist learners in the acquisition of skills, attitudes, and knowledge through the use of choices and variety of teaching methods and media;
- To guide learners to self-actualization;
- To be able to access information and achieve versatility in knowledge;
- To be scientifically (and technologically) literate;

- To participate in the uplifting of the teaching profession;
- To participate in national issues and affairs.

Questions of concern in all regions include the changing characteristics of teachers, in terms of such matters as those suggested from the Latin American and Caribbean region:

- shifts in education systems and schools such as: the change in focus from teaching to learning; from the focus on the coverage of curricular contents to one on the development of cognitive and practical abilities; and from the focus on time as an administrative concept to time as an academic condition for learning;
- the shift in teachers as teachers: from seeing themselves as bearers of knowledge to be communicated to seeing themselves as stimulators of knowledge to be constructed and developed by pupils through the learning experience; from believers that pupils, although different, should be homogeneous, to believers that pupils are and will remain different; from executors of teaching procedures recommended by others, to designers and /or adapters of such procedures; and, from being isolated individuals in their classrooms, to being co-workers collaborating in the improvement of teaching and learning.

One should not underestimate the difficulties which will arise in changing the professional profile of teachers. Among these one should bear in mind that teaching is an activity carried out by a very considerable number of people. Everything indicates, moreover, that the number of teachers will continue to increase, whether it is due to the expansion of the educational coverage needed in countries which have not yet succeeded in ensuring basic education for all, in offering post-obligatory education to an appropriate percentage of their population, or because of the permanent demand for lifelong education which grows along with the social development process.

The quantitative expansion of the teaching profession has sometimes resulted in the deterioration of quality and significant internal disparity. This internal disparity is linked not only to the professional performance at various levels of the system but also to: (i), *distinct types of activity*, ranging from work in the classroom to management, supervision and special attention given to particular needs of the pupils and (ii) *very different levels of qualification* required for the implementation of the same activity. In this regard, the international comparison is very eloquent: for example, to be a primary school teacher in many places only requires a few years of basic education whereas, in other ones, a higher education degree is necessary. Very few professions have such a broad range of disparities with regard to the formal qualifications required to perform them.

The quantitative expansion of the teaching profession has also been associated, in most cases, with a serious deterioration of the profession's prestige, of its social status and of material living conditions. All these factors shed light on a phenomenon which can be found in all regions of the world: the teaching profession does not attract the most talented youth and constitutes, in many cases, a transitory activity during the search for another, more prestigious, job. Training insufficiencies, natural resistance to professional reconversion – especially on the part of older teachers – as well as the complexity involved in implmentating changes in such a rigid institutional system as that of education; all these call for imparting as much importance to the modalities of change as to the final objectives which justify these very changes.

Current and future challenges confronting teachers, with the implications for a redefinition of their role, require the adoption of a set of measures that enable teachers to carry out their responsibilities

in a way that is appropriate to meaning the needs that new forms of social, economic and political relations are creating - locally, regionally and worldwide.

One of the purposes of this paper is to take a critical look at various "accepted ideas" regarding the role of the teacher in a changing world. As Fernandez (1996) has pointed out, according to the guidelines of several international organizations, some national policies and many local initiatives, the debate and strategy regarding ways of accommodating the changing role of the teacher should focus on changing the school environment, instead of continuing to encourage teachers to change themselves without altering the school system. The same author goes on: "This points to a new profile of schools and teachers, where added significance is attached to the collective professionalism of the *learning school*, and to the diversified professional profiles of teachers".

Despite the great diversity that exists between different regions and countries in the world, there is substantial agreement regarding the major issues and concerns that need to be addressed with regard to finding effective ways of strengthening the role of teachers. What is apparent from this survey of views from different regions of the world is that the role of the teacher has changed considerably over the past few decades in many parts of the world, and it is likely to continue changing for at least the foreseeable future. This has important implications for the types of people who need to be recruited into the teaching service, in terms of: their personal qualities rather than just their academic qualifications; for the type of training provided for them before they enter the occupation; for the need for professional development through in-service training during the full span of their professional lives; and for the career and reward structures within the occupation that will prove satisfactory enough to retain individuals within the occupation over the long term.

Discussions on the role of teachers in a changing world need to take place in the context of the contribution education and teachers can make in accelerating democratic processes. As we stand on the threshold of the coming century, it is also an appropriate time, as was noted in UNESCO's Medium-Term Strategy for 1996-2001, to place two other important objectives on the agenda for consideration – development and peace – since teachers have a considerable contribution to make to realizing these objectives. However, for this to be achieved it will be necessary to raise the social status of teachers themselves, to give meaning to their role ion the transformation of education and society, and to inculcate a greater understanding, in the general public, of their vitally important contribution and the significant changes that are occurring in their role due to the rapid rate of change and the impact of new parameters influencing their roles.

The status of teachers and their employment conditions

There is almost universal agreement from commentators in all quarters of the teaching profession and all the regions that the status of teachers has not been strengthened since the 1966 ILO/UNESCO Recommendation and has even, many would assert, declined. Teachers are said to be in a state of disillusionment as their working conditions fail to improve, while demands on them grow stronger from all sides and stress mounts.

Discharging the responsibility for this decline on the authorities is not the only view. Teachers and administrators have also been criticized by some sources as bringing about their own fall in status. Some see teachers as being strongly unionized, requesting benefits for themselves and not necessarily for education. Administrators, too, do not escape criticism as, from their safe and anonymous castles, they are seen to thwart teachers in the exercise of their duties.

There is also a pedagogical dimension to change which has affected the status of teachers. Not only have communities become more knowledgeable, but their members are less reticent to be critical of teachers who have failed to ensure their students' achievement, or who are too conservative in the classroom. In addition, some pedagogical theories underestimate the input of the school and of teachers in learning achievement and/or in social mobility.

A clear link is perceived on all continents between the status of teachers and their working conditions particularly salaries and living conditions. The situation among regions and within them are different. But whether salaries and conditions are relatively high and good, or low and poor, the claim remains that either they do not concord with the status of teachers or they are responsible for the decline in that status. It is argued that better remuneration packages would reflect better the status of teachers and of education in society. There is a considerable amount of detail in the regional reports as to other aspects of teachers' employment conditions that deserve attention and improvement. These include the provision of adequate welfare programmes, including pension schemes and employment packages ensuring good living conditions, more clearly defined hours of work and distinct guidelines clarifying work required during out-of-school hours, etc.

Along with the more clearly personal employment gains, which are said to lead to gains in status, there are the pedagogical that have not already been mentioned. These include pupil/teacher ratios, the teachers' workload, career pathways and promotional structures. One matter attracting particular attention is that of teacher stress, the factors causing it, the evidence of it and the need for remedial action to be taken both to assist individual teachers and teachers at large in terms of their status.

Whilst the following extract, providing a detailed list of conditions which are said to have deteriorated with respect to other professions, is reflective of the European region, other regions would wish, no doubt, to be identified with these problems: "Rigidity of education systems and school organization; instability of education policies and fragmentation of responsibilities; impatience of political authorities to see reform results; uncertainty and increased job constraints and increased stress (physical and psychological) among teachers; pay stagnation compared with professions requiring a similar level of qualifications; pay uniformity("no real reward for work quality"); lack of, or very limited, career prospects; stagnation or degradation of buildings, and equipment; too few further training opportunities; lack of long-term recruitment policy; poor guidance for teachers and students; unfavourable conditions for team work; too little time for out-of-school activities and increased workload owing to proliferation of subjects; added responsibilities without increased resources; loss of job satisfaction and low morale; less social consideration; lack of clear role and status, etc."

Identifying alleged reasons for the decline in the status of teaching and detailing what counts as status are not difficult in terms of compiling lists of items. What is difficult in each country context, and even within countries, is identifying what remedies will actually address the issue of status and how, how well and how soon will the status of teachers be improved by implementing the remedies identified.

III. TEACHER EDUCATION AND TRAINING[1]

Relationale for the modernization of teacher education

"Good education requires good teachers" means that it becomes essential that the most capable and appropriate people be recruited into the teaching profession, provided with a high quality pre-service programme of teacher education, and then offered opportunities to upgrade their knowledge and skills over the full length of their professional career. It is therefore essential that there is a major reorientation of teacher education to ensure that teachers are furnished with the necessary knowledge and skills to cope with the new demands placed on them. Teacher education needs to be adequately strengthened and upgraded to accommodate the changing role of the teacher, and so that teachers can effectively address contemporary issues regarding education.

In addition, because of the impact of social and other forms of change in society and the demands placed on the school system, there is a need for the constant upgrading and modernization of the knowledge, skills and understanding required of teachers. This has clear implications for the content and methodology of teacher education and stresses the need to adopt an approach which emphasizes the career-long professional development of teachers. Teacher education, therefore, has to be reformed in order adequately to prepare teachers for their new and more diversified functions in the school and the community. Teachers are also increasingly expected to handle, in their day-to-day work, a number of issues of critical importance in the present day context, such as education for human rights and democracy, values education and environmental education.

The move towards the democratization of education has necessitated a large expansion of the teaching service in all countries, in order to cater to a larger number and more heterogeneous groupings of students than was the case in the past. The school is no longer reserved for the select few and is no longer the only place for learning. Teachers need to be able to deal with a wide range of learners of varied intellectual, cultural and social backgrounds in urban and in isolated contexts.

The following is the collective view of various countries regarding what they believe to be the various aspects of the teachers role at the current time. The teacher is expected to:

- promote skills and competency in literacy and numeracy, sensitivity to the environment and harmony between the school and its community;
- help the growth of basic skills and attitudes for proper and continued development of cognitive, social, moral and emotional development;
- transmit culture and knowledge, and help students become aware of the world community;
- nourish creative and critical abilities;
- encourage adaptability in a dynamic and ever-change society;
- help each individual achieve full self-actualization to become a fully functional member of

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[1] The term "teacher education" is being used here to include both initial and in-service teacher training. We are making a distinction between education and training following the International Standard Classification of Education (ISCED), which defines education as "organized and sustained communication designed to bring about learning" in a broad sense, with the term "training" being reserved for "education that is directed mainly towards the acquisition of skills".

society;

- provide the students and the community with an admirable role model as a professional teacher;
- ensure students' physical well-being;
- be accountable to the community and its parents.

In order to undertake these tasks, experts at regional meetings believe that teachers need to:

- ensure their continuing personal development, including the upgrading of knowledge and teaching skills;
- be aware of the values and attitudes which lead to a healthy human society;
- be involved actively in the affairs of the local community and society;
- provide effective management of the learning environment and resources;
- be skilled in linking the curriculum of the school with the needs of the community;
- be skilled in counselling individual children and the management of groups of children;
- be skilled in the use and choice of a variety of teaching methods;
- be skilled in working with parents and other members of the community;
- be skilled in a variety of appropriate research methodologies.

The general expectation is therefore that teacher education should be modified to ensure that all teachers have the knowledge, competencies and sensitivities to accommodate all these aspects of the teacher's role.

All regions agree that there is a need to concentrate on promoting the professional competence of teachers and other educational personnel, through the development of institutional facilities and services, new skills and attitudes through personnel profiles, emphasizing professional support services, and the training and continuous education of all educational personnel.

Countries in all regions of the world have identified a number of major issues regarding teacher education which require urgent resolution. To facilitate discussion, these issues are grouped under six main areas:

Recruitment

In many countries, there is an ongoing debate regarding what prior experience/qualifications entrants to teacher education courses should have. In some countries, entry to the occupation mainly depends on academic results, while in others it is felt that the personal qualities of those who enter teaching are more significant, and so an interview component is an important part of the selection process. With regard to recruiting sufficient numbers of teachers into the occupation in the areas of need, countries are concerned about the problem of the time delay between recognition of needs and completing the selection and training of teachers, since most systems respond too slowly to changing circumstances. How to introduce greater flexibility into the recruitment process is a concern in all regions.

Initial preparation

All regions agree that those who enter the teaching service should receive an initial period of teacher training. Although up-to-date figures are not available for all countries, for those where data exist, the highest proportion of uncertificated teachers tend to be found at the pre-primary and primary levels. Given the move on the part of most countries to achieve the universalization of basic education, and given the major problems of student dropout and repetition faced in such countries, this lack of teacher training is a matter which warrants urgent action from policy makers.

Opinions were expressed by many regional experts in favour of raising pre-service education for all categories of teachers to the university level, as a means of improving their professional qualitifactions and, consequently, the quality of educational provision. In many cases, however, it was felt that this measure runs the risk of increasing the gap between initial training and performance requirements.

Institutions' heterogeneity and diversity in the type of qualifications offered in some countries - for what is basically the same type of teaching tasks - suggest that the content of training may also be diverse depending on the institution and the quality of teacher educators in those centres. Greater attention needs to be given to 'quality control' in teacher training.

Most regions report that there is little specific information that exists in a centralized form on the content and quality of teacher training courses, especially at the primary level. Countries have also reported shortcomings in a number of respects:

(a) Inadequate provision can be observed in many countries in the training of teachers to meet the learning needs of special groups, such as indigenous and linguistically diverse populations.

(b) A lack of practical relevance of the curriculum, either in sense that contents are too theoretical and that there is little action-research for teacher trainees, or that teaching practice is limited to theoretical-type classroom lecturing.

(c) Perhaps the greatest criticism of all is that many teacher training courses do not provide a positive role model in terms of "best practice" in teaching. For example, even in countries where student teachers are being encouraged to adapt more progressive, child-centred methods, they themselves are trained in setting which concentrate on the lecture method, with examinations as the main form of assessment, and where their lecturers adopt a "teacher-centred" approach.

Countries are experimenting with different ways of training student teachers at the pre-service level, a major concern being the best way to link theory and practice. The predominant teaching method used throughout the world for the initial preparation courses is didactic, that is, instruction to large groups with an emphasis on imparting information. This is often refereed to as the "experience-based" approach, where it is assumed that, if student teachers attend lectures and write essays on what they have learnt, this knowledge will transfer into better classroom practice. However, in many countries there is increasing scepticism about this assumption, and so a greater emphasis is being placed on performance or competency-based teacher education, which stresses actual observed and measurable behaviour in the classroom. A key concern in all regions is that teacher education should provide a good role model for effective and desirable classroom practice: that is , "that it practices what it preaches".

Career-long professional development of educational personnel

The effective induction of beginner teachers into the occupation is one of the key problems in the majority of regions. This reflects a common concern with providing an effective bridge between the training institution, where initial preparation occurs, and the actual school and classroom where beginner teachers commence their careers.

There is also widespread agreement that the initial preparation of teachers should be the basis on which their further professional development is built, there being general agreement on the importance of in-service teacher education and the career-long professional development of teachers. In-service education is also seen as an effective agent of change in the education system and in society. However, due to resource constraints, countries vary in the extent to which they are able to implement, in reality, this ideal.

A significant trend is the effort being made to involve teachers more in the decision-making process concerning the organization of in-service training courses, this

being related most strongly to school-focused courses. In all regions, there is an increase in the tendency to focus the models of in-service teacher training more on the school. However, this does not mean a reduction in teacher-focused models of in-service training, since for most models the development needs of the school tend to predominate. The tendency to try out innovatory methods of in-service training is of increasing importance in many regions. This choice reflects new problems which confront education an/or societies throughout the world, such as environmental education, health education international education, computer and information technology, and the solution of other so-called global problems.

If the Delors Commission prognosis is correct, then there should be greater interaction, integration even, between the pre-service and in-service dimensions of teacher training. For instance, why should teaching of all the theory precede testing and learning in practice? In some institutions, experimental variations on this premise are being tested, with practice teaching taking place much earlier, or with professional professional preparation being broken up into two or even three stages, interrupted by a few years of actual teaching.

This is not a concern, since it was at the core of the thirty-fifth session of the International Conference on Education (ICE) held in Geneva in 1975 and entitled "The changing role of the teacher and its impact on preparation for the profession and in-service training". One of the most important and far-reaching recommendations arising from that Conference was that Member States believed that teacher education should be organized to become a continuous, career-long process starting with pre-service training and continuing for as long as the teacher is in service. The Conference also stressed the need for full and effective teacher participation in the educational reform process, this being a vital prerequisite if it is to be truly effective.

Other key educational personnel

Many countries are also exploring patterns for the career long training of other key educational personnel, such as school principals, curriculum advisers, administrators and educational planners. Greater attention is also given to the creation and improvement of a system of incentives in order to make in-service training an integral component of the professional life of teachers.

Teacher education is a crucial area for educational change and development, and so countries in all regions are exploring what patterns can be best devised and implemented for the strengthening of the quality and effectiveness of teacher educators themselves. In the past, the development needs of classroom teachers have been stressed while those of the teacher educators have been overlooked underplayed. Thus, in most regions, there is an increasing emphasis on a "training the trainers" approach to improving teacher education at both the pre-and in-service levels.

Support service

In strengthening teacher education courses, there is a common concern amongst regions regarding how they can best develop high-quality teaching and learning curriculum support materials, with an appropriate local emphasis. Countries are also exploring how an approach can be developed with regard to the use of modern technology which is economically feasible and allows beginner teachers to keep in touch with what is happening at the forefront of technological development. Countries are exploring the notion of "teacher as researchers" and ways of providing research services both for schools and for teacher education, which will enable them to: carry out investigations in the local setting; keep track of developments in theory and practical skills; and provide comprehensive statistics and qualitative studies on social and technological changes.

System links and cohesion

To be most effective, teacher education should not exist in isolation, and so countries are exploring ways of developing good liaison between teacher education and other education sectors. Teacher education is also being related to national priorities in

education, such as social and moral policies, language policies and cultural policies. In addition, attempts are being made to explore and cope with system-related problems which have an impact on teacher education, such as a lack of teacher support for those working in rural areas, the low social status of teachers and low teacher salaries.

IV. NEW INFORMATION TECHNOLOGIES

There is agreement from all regions that new information technologies have already begun to or will provide a challenge of considerable importance to education systems, schools and teachers. It is important to identify aspects of this challenge in terms of the impact already felt so that those who have not yet confronted this question may maximize the benefits and minimize the burdens.

One of the features of the advent of new information technologies is simply the size and diversity of the onslaught. One the information side, one has to address such assertions since it is estimated that the volume of human knowledge will double in less than ten years. Schools and their teachers are not now regarded as the sole repositories of knowledge. What will be their status in ten years time? How can and will they be relevant? If that were not enough, there is the technology attending this information explosion, with its computers, language and skill demands.

Suddenly, literacy and numeracy assume a new importance. For, now, they are not merely central to the curriculum in terms of schools and students. Teachers, too, have to return to them. In particular, the computer illiterate teacher is a liability, not only in terms of employability but also in the overall status of teachers. Of what use is a teacher less literate than most, if not all, of the students in a class? The problem becomes one for employees and teacher educators. Theirs becomes the

responsibility for providing the means for the teacher to become literate in the changing world of new informatica technologies

Technology itself becomes a means by which this can be done. In fact, it can be used to address the needs of teacher educators in terms of both pre-service and in-service training. But its use in the former is not without dispute. Two of the largest populated countries hold differing views of the role of computer-based instruction in pre-service education. In one, it is claimed that technology has been used to great effect, with rapid improvement in meeting the demand for trained teachers. In the other, a view is held that technology school not be used for - pre-service education, as it cannot displace the personal interaction required in such courses, particularly in terms of the teaching practicum. This divergence of opinion is symptomatic of the benefits and burdens which are seen to be linked to the use of technology in education. These issues have to be addressed, with the possibility that the solution may be found in both, and not in "either/or".

New information technologies provide the means for changing the face of teaching both in systemic terms and in the localized setting of the school and classroom. As to the former, distance education takes on a new meaning as technology makes multimedia communication and inter-active teaching possible, enabling education providers to meet the demands and needs of almost all populations. The economics and logistics of implementing such provision are daunting where no infrastructure exists. But the feasibility remains for a quantum leap in providing educational services. More immediately, new information technologies affect the school and classroom, at least in respect of the curriculum, pedagogy and administration.

Curriculum. New information technologies bring with them new subjects for the curriculum, such as computer education. They also make it possible to expand existing areas of study, particularly those related to international studies and the environment. They will also necessitate radical changes in the basic subjects of literacy and numeracy. Delivery of the curriculum will also change - no longer resorting to just the standard text alone. Whilst the possibility remains for teachers merely to use system-prepared curriculum material, they are also exposed to the ever-growing private market of educational programmes. More importantly, it becomes feasible for teachers to prepare their own, contextually related curriculum materials. Curriculum change does not come without a price. The question of who should control the curriculum obviously arises as new providers emerge. It requires time, application and money for teachers to sift through the range of materials becoming available or to attempt their own production of teaching material.

Pedagogy. Teachers and methods of teaching are forced to change with the advent of new information technologies. Where teachers are still regarded as the fount of all wisdom - and often teacher educators are as guilty as most in promoting this notion - the reality will strike home that they cannot be. The teacher's role becomes more dynamic than static when serving students as agents of change, enabling them to meet the needs and challenges of a changing world. Teacher will become pro-active in terms of facilitating, sorting and managing students' learning. They will promote interactive learning, peer teaching and open learning as they utilize the teaching resources which new information technologies both provide and enable. The overall task will be the empowerment of students within the context not merely of known information technologies but of those to come.

There is human cost factor involved in this pedagogical serving. One aspect of this is the displacement of longer-serving teachers who have not followed in-service training and who are overtaken, if not overwhelmed, by recent advances in information technology. If this is not

addressed, the status of teachers will surely be affected. New information technologies bring with them an imperative for enhancing and strengthening the role of teachers. Teachers need to be given every opportunity to progress into the new age with dignity and status.

Administration. The streamlining of administrative processes to provide better means of both storing and networking information becomes very possible with the use of new technologies. Systems have already been developed in some countries which enable information about teachers, students, curriculum and best practices to be collated, stored and made available. This has been seen to enhance the status of teachers in terms of their relation to centralized employers, in that matters under complaint - ranging from physical isolation to delayed employment issues such as salaries and leave - can be more easily identified and addressed. Perhaps more importantly, efficient administration of this type aids teachers in the classroom. Let us take but one example: the itinerant child. In cases where records have been efficiently entered and are electronically recoverable, the education of such children can be both covered in terms of ensuring their experience of the whole curriculum and efficient since they may not necessarily have to repeat the curriculum. Furthermore the statistics of the child, particularly with respect to special needs, are available to the teacher. In such ways as well as for more efficient administrative purposes, new technologies can be called upon to aid the teacher.

The inevitable advance of new information technologies into even the poorest domain is recognized on all sides. Systems and schools, administrators and teachers who do not accommodate new information technologies will distance both themselves and schools from the information revolution, turning schools into institutions of ignorance and affecting the status of teachers accordingly. The question confronting decision-makers is how to react in the most positive and efficient way, given the lack of resources and opportunities to experiment, test and select the most appropriate equipment. There are too many accounts of technological equipment lying idle through want of trained operators, incompatible equipment, lack of spare parts or serving, and becoming redundant in the process. How to avoid such situations, and to react positively to the new information technology imperative, are matters only to be identified and not solved in this paper. Their solution remains in the hands of individual countries and governments faced with each idiosyncratic situation.

Citing figures to measure the information explosion tends to disguise two matters. One is that the information explosion is understated in terms of source material. There is a considerable amount of information to be found in developing countries and regions which has yet to join the international information circuit. The implication of this is not so much the boost, still to come, to the information explosion but that the basis for the "chip hegemony" is largely a "western" one, with all the implications this has for the global village in terms of language, information and values. A second concern of the chip hegemony is the place and, hence, status of teachers in the educational context. Earlier fears of their likely displacement have been allayed, as demonstrated in regions with longer histories of new technologies, such as Europe.

But displacement is a concern not merely of numbers. The teacher's position as a source of information is very much called into question. Further, the capacity of the teacher to influence values is diminished as interactive technologies encourage self-learning and peer teaching. Countries, schools and parents are discovering all too quickly that new information technologies make possible the purveying of values and ideas not necessarily deemed to be in the child's best interests.

The hegemony also spreads to the very heart of education, with value-laden curricula of all on offer, long-treasured technologies - such as blackboard, chalk and paper - being overshadowed and the two of the basics - writing and arithmetic - being displaced by the ability to punch keys and buttons or control a "mouse". As already indicated, urgent action is necessary to bring teachers into the "new age" with an appropriate re-definition of their role and function.

A very appealing application of new information technologies in education is their application to distance education. This appeal arises from the large number of persons who can be accommodated at seemingly lower costs, the advantage brought to disadvantaged sectors of the community, the capacity to cater for persons unable to leave their locations for work, family or personal reasons, and the capacity for self-paced learning. Offsetting these advantages are two problems: the students' capacity to cope with education via the distance mode; and the teachers' capacity to forsake old ways and use the distance mode to their advantage. Learning to learn is no less a need with new information technologies than with old, and students need to learn how to optimize the distance education modality.

The issue of the cost-effectiveness of distance education for teacher development requires more analysis. The cost of distance education is considerable, with high initial costs relative to recurrent budgets. For small countries, these initial costs can be formidable. While there has been much rhetoric about the potential of distance education for teacher development, there is relatively little in the way of accurate studies of its cost-effectiveness. There are many "hidden costs" in developing distance education, both in supporting quality outcomes and in making it practical to implement. Hence, there is an urgent need to undertake a study of the cost-effectiveness of different approaches to distance education. Such a study should examine distance education in more than just large population countries and should analyze various approaches in different situations.

The following comments from regional inputs for this Conference indicate attitudes to the advent of new information technologies.

From Europe, it is observed that the new information technologies and the role and function of teachers represent a challenge both as a goal and a means. The new information technologies are important areas of study. At the same time, they are tools for the teaching and understanding of other subjects. Teacher education has to prepare future teachers in both areas. A few years ago, total optimism prevailed. The new technologies were seen as the teachers' successor, changing the profession to one of guidance and administration. As with the former technological wave of the late 1960s and early 1970s, limitless optimism now turns into a more pluralistic view, exploring both positive and potentially negative aspects of the new technologies. Most experts on information technology seem to agree on one thing: we have just seen the beginning of an educational revolution which, in time, will change the very concept of teaching and learning.

The most notable consequences of current and future challenges facing education in the Arab World are those related to the teacher's role within a context of accelerating change in the technological, social, economic and political spheres of the present age, requiring a new type of education where new skills are needed by learners.

A Latin American source argues that it would be a fallacy to think that new technology, such as software, computer and other audio-visual materials, has no place in poor countries, or in schools that serve the pooper populations or more isolated regions. Precisely because it has power of producing a qualitative jump in the processes by which children, with limited prior experience to

assist them, come to understand difficult concepts, and because such technology can provide children with a vision of the wider world while at the same time helping teachers to improve their content and practical knowledge, such technology must have a high priority in the allocation of resources to education.

It is suggested from *Africa* that the school has fallen far behind the home in its suitability as an environment for learning. Television and radio sets are scarce commodities in the school. The hi-tech architectural designs of buildings and offices are not reflected in any way in their neighbourhood schools. In industry and commerce, there is heavy reliance on the latest technologies informatics and communication systems. These hardly exist in the schools. The school house in Africa could well be the last foothold of unscientific culture, which has to be dislodged before the 21st century.

The proposition for consideration from the Asia-Pacific region is that, given the benefits and burdens that new information technologies bring to the role and functions of teachers, it is in the interest of governments, as and when new information technologies become available:

(a) to ensure that teachers become computer literate;

(b) to provide teachers with the most user-friendly technological resources (and appropriate support services) for teaching purposes; and

(c) to assess the efficiency (pedagogical and economically) of technology as a means for delivering educational services.

V. MANAGING EDUCATIONAL CHANGE: PARTNERSHIPS

Educational management is an important variable in the determination of school performance. Such a premise suggests the need for attention to be paid to those factors in educational management that determine its success. The research cited by several regions indicates that teachers working in groups or teams with responsible directors or principals are the key to the successful management of schools. The recognition of this claim may pose problems for administrators unwilling or unable to let go of their present management functions. It may also perturb principals and teachers once they realize that, with a co-operative authority, they can play a significant role in managing educational change.

If responsibilities for school learning outcomes and management are transferred to schools, what outcomes might be expected? One answer which is reflective of much research in the area suggests that: "Greater participation in decisions reduces the impression of helplessness and isolation which is often felt by teachers who are nothing more than the employees of a weighty administrative machine. By taking part in decision making, they may gain greater trust in those involved in administering the school (...). Teachers have access to information from other sources than the principal (...). There are fewer conflicts (...). Teachers have less of a tendency to think in terms of them as opposed to "us" (...). Decision making encourages teachers to take an interest in more general educational problems, while facilitating exchanges with teachers in other disciplines, other classes and other regions, and encourages them to consider different solutions and to state and defend their opinions"(OECD, 1990, p.120).

A critical aspect of the developing role of teachers, as managers of educational change, is their

capacity to work co-operatively in the management of the learning process. The suggestion is made in research from several reports that a positive co-operative spirit amongst the teachers encourages them to dare to manage innovatively and to good effect. This has implications for teacher education as much as for school management plans. The age-step method of school organization has led to teachers being educated into a culture marked by independence, even distance, from their collages. According to Murphy (1991, p.29), institutional reorganizations that need to take place in teaching institutions should therefore include opportunities for teachers to work together in the planning of their activities, monitoring progress, examining curriculum and teaching materials and, generally, having the opportunity to reflect on their teaching and on the quality of the learning experiences of their students. These opportunities constitute a central condition for what is considered a target for the renewal of teachers and teaching, the development of a "professional organizational culture".

The concentration on the teacher's role in participating in school management may lead to an improvement in teachers' view on their status. The internal partnership of teachers with teachers (including principals) is the *sine qua non* for managing educational change most efficiently. What will attract the interest of those most vitally interested in the learning process – students, parents and the community – will be a demonstrated improvement in the quality of the schooling available.

The measurement of that improvement involves the whole question of evaluation, especially with respect to teachers' performance. The trend to relate teaching with competencies and performance-based evaluation suggests that evaluations of teachers should relate to: (a) pedagogical competence; (b) classroom management; (c) occupational responsibilities; and (d) inter-personal relationships, particularly with respect to students and parents. It is argued that evaluation related to the above, in support of teacher development, will enhance status.

The regional meetings strongly supported the idea that, with teachers' professional initiative being enhanced, their participation in policies and planning for the teaching environment would reinforce teachers in becoming educational leaders. There is, however, a divergence of views within and across regions as to the degree of autonomy teachers have or should have. It is also argued that teachers do not always recognize the autonomy which they have and exercise in day-to-day decisions about their teaching or their pupils and students. It should also be noted that teachers have not always sought autonomy when it has come on offer, as for example in proposals to decentralize schools and their administration. Another point of controversy concerns autonomy versus national/social cohesion. Many decisions concerning autonomy and decentralization have been promoted by financial constraints or local cultural requests. Autonomy without adequate compensation programmes could reinforce inequity. Autonomy without some common ground could place a brake on national cohesion.

Schools are and will be communities of learners. Teachers' status hangs heavily on the degree to which they perform successfully in this learning environment. Part of that success will be attributable to the extent to which teachers recognize the partnership base with students, upon which both an enjoyable classroom experience will flow and positive learning outcomes ensue. As with all partnerships, it has to be a working relationship in which all parties recognize the potential of the other. Whilst nomenclature such as "teacher-centred teaching" and "learner-centred teaching" are all too simplistic, the latter serves both to identify a widely accepted pedagogical statement and identify a positive role for students in the learning partnership. One has to raise again the issue of new information technology as a powerful "teaching" factor from which students learn. If teachers fail to provide learning via new information technology and to bring the learners into partnership, they may find themselves amongst the ignorant rather than the educated. Whilst it is not appropriate

to spell out anything like a model teacher/student partnership modality in this paper, it is important that the partnership be acknowledged and form part of the learning process.

Beyond teacher/teacher and teacher/learner partnerships, a range of further ones can serve to strengthen school performance and the role and status of teachers. "Partnerships with purpose" is one slogan to have emerged from the regional meeting underpinning the ICE. The point of the slogan is that forming partnerships for their own sake is pointless. Rather, partnerships have to be forged with others who are co-operative and who want to strengthen the teaching/learning process, whatever its format.

Participation with employment authorities and teacher education institutions is of obvious importance. Other partners also need to be embraced, both within the teaching profession (teacher associations in particular discipline areas, for example) and with extra-education partner such as booksellers, software producers and media personnel. The list could go on. But teachers are in a position to tap an amazing range of partners in furthering their interests and their status.

There is unanimity in the various regional reports that the world of education needs to react positively to a range of extra-school groups and institutions, such as family, businesses and mass media. Forming partnerships with them is necessary but is not without its difficulties, particularly in multi-cultural societies - which most societies are. Such issues and problems need to be identified and conflict resolved in partnership. In order to promote partnership, people need to know what happens within the school. Adequate information about projects, methods, activities and outcomes is one of the most important instructions for promoting partnership. It means that not only the school should be open to extra-school institutions but, at the same time, the latter should be open to the school. More attention on the part of the family to the school's requirements, more and better arrangements between the school and the business world in order to improve the quality of education, co-operation from the mass media in terms of values education, for instance, are some of the expected outcomes of new partnerships in education.

In conclusion, partnerships succeed and fail, partners agree and disagree. The partnership route is not without its problems, but provides a viable way forward compared with the isolationist alternative. Three things may be suggested in terms of enhancing the partnership model of change. The first is that there needs to be more analysis and evaluation of partnerships to understand how and why they work. Second, there is a need for attention to be paid to conflict-resolution theories and processes if the integrity of both partners and the partnership process is to be maintained. Third, if the management of change is to be part of the teacher's repertoire, teacher education institutions need to make provision for this. For, in the end, partnerships are essential both to the function and status of teachers.

VI. UNESCO's ACTIONS IN FAVOUR OF TEACHERS

Throughout the whole of its history and its various programmes and concepts – among the most recent ones mention should be made of education of all, promotion of a culture of peace, learning without frontiers – UNESCO has not ceased to emphasize the fundamental role of teachers in educating present and future generations. Empowering teachers – individually and collectively as a professional body – with the added synergy of renewal in a constantly evolving learning environment through: the mastery of the new information and communication technologies; improving the working conditions and upgrading the status of teachers; updating their knowledge,

skills and methods of operation; developing partnerships with organizations of the teaching profession and other actors in society - these are the main guiding principles of UNESCO's Medium-Term Strategy for 1996-2001 concerning teachers. Further demands will be placed on UNESCO under its Medium-Term Strategy, such as to be significantly involved in assembling and disseminating information and in research and innovation on teacher education.

A considerable part of UNESCO's activities has been centred, since 1966, on the implementation of the ILO/UNESCO Recommendation concerning the status of teachers. These activities have been carried out in close co-operation with the ILO and the organizations of the teaching profession within the framework of the Joint ILO-UNESCO Committee of Experts on the Application of this Recommendation (CEART). Through this collaboration, UNESCO prepared in1984 a booklet on "The Status of Teachers" (the updated version is under preparation), organized several national and sub-regional seminars/workshops, produced 15 case studies on "The Initial and Continuing Education of Teachers" and launched, in co-operation with Education International and the World Confederation of Teachers, five monographs on the application of Provision 3, which deals with the global objectives of education, of the ILO/UNESCO Recommendation. A reference package for teacher education with pertinent guides and visual and printed documents is also under preparation.

The sixth Ordinary Session of CEART (July 1994), upon examination of the current situation regarding the status of teachers, formulated proposals for future action. They were endorsed by the Executive Board of UNESCO at its 146th session and resulted in a letter to Member Status from the Director-General, CL/3397 of 17 October 1995, regarding their follow-up. This session of CEART also adopted a special message to the participants of the forty-fifth session of the ICE.

At the initiative of several Member States and international non-governmental organizations, the General Conference of UNESCO at its 26th session deemed it necessary to establish as International Teacher's Day which was launched by the Director-General on 5 October 1994 during the forty-fourth session of the International Conference on Education. Expected to be widely celebrated annually at the national and international levels, International Teacher's Day particularly endeavours: to sensitize public opinion to the important role teachers play in social, economic and cultural development; to stimulate discussions on the position of teachers and encourage reflection thereon among parents, at cultural and information centres, and in libraries and teachers' associations; to encourage international solidarity among teachers of the world, and to develop exchange of information and experience among teachers.

The participants at the ICE are expected to share their experience in celebrating International Teacher's Day and suggest measures to make this day a significant and stimulating event, an occasion for reinforcing the teachers' morale, social standing and professionalism.

VII. CONCLUDING REMARKS

The present document should be considered as a background to stimulate the discussion with a view to facilitating the adoption of the two main instruments of the forty-fifth session of the ICE: the Declaration and the recommendations.

The provisional draft of the Declaration (ED/BIE/CONFINTED 45/4), inspired by the teachers' mission as agents of social change and in the transformation of education systems, emphasises the professional autonomy and participation of teachers in the management of education system and in the process of educational change. It calls upon various social partners for efficient partnerships and

for solidarity, particularly with teachers who are working in difficult situations, and suggests the adoption by Member States of integrated policies whose implementation would succeed in training motivated, competent teachers, genuine catalysts of educational renewal and promoters of effective partnerships between the school, the family, the mass-media, businesses, teachers' associations and other institutions.

A set of recommendations (ED/BIE/CONFINTED 45/5) attempts to develop in more operational terms the political commitments suggested in the draft Declaration. The nine draft recommendations, constituting a single document, focus on:

Recommendation N° 1: Recruitment of teachers: attracting the most competent young people to teaching.

Recommendation N° 2: Pre-service training: a better linkage between pre-service training and the demands of an innovatory professional conduct.

Recommendation N° 3: In- service training: both a right and a duty for all educational personnel.

Recommendation N° 4: The involvement of teachers in the process of transforming education: autonomy and responsibility.

Recommendation N° 5: Teachers and their partners in the educational process: education as a responsibility for all.

Recommendation N° 6: New information technologies: serving to improve the quality of education for all.

Recommendation N° 7: Professionalisation as a strategy for improving the status and working conditions of teachers.

Recommendation N° 8: Solidarity with teachers working in difficult situation.

Recommendation N° 9: Regional and international co-operation: an instrument to promote teacher mobility and competence.

During the process of discussing the Declaration and recommendations, participants at the ICE are invited to reflect upon the desirability of a special programme addressed to teachers which could begin with the 1998-99 biennium.

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